CLAHRC East Midlands October 2018



## **CLAHRC**BITE

Brokering innovation through evidence

# Global achievement of evidence-based targets is markedly suboptimal and not improving



#### Results

Considerable variation exists in the achievement of glycaemic control, blood pressure, and lipid targets in people with type 2 diabetes mellitus (T2DM) globally.

#### Who needs to know?

All people managing diabetes or involved in diabetes prevention programme.

#### What did we do:

We performed a systematic review and metaanalysis to describe the proportion of people with T2DM achieving targets recommended by the American Diabetes Association (ADA), European Association for the Study of Diabetes (EASD), or National Institute for Care and Excellence (NICE) for glycaemic control, blood pressure, or lipid targets.

Lipid targets comprised targets for low density lipoprotein cholesterol (LDL-C), high density lipoprotein cholesterol (HDL-C), or triglycerides. This systematic review and meta-analysis was performed and reported in accordance with the review protocol registered with PROSPERO and in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) and Meta-analyses Of Observational Studies in Epidemiology (MOOSE) quidelines

### What we found and what does this mean:

A minority of people with T2DM achieve targets for glycaemic control and blood pressure. Lipid targets are achieved for LDL-C in around half of people and more than half for HDL-C and triglycerides. Considerable variation exists between countries in the achievement of targets.

Whilst many contemporary studies were identified which measured achievement of guideline targets, these studies were mostly of limited quality and did not consider achievement of individualised targets.

#### What next:

Whilst the existing data support the assertion that substantial global improvement is needed in the attainment of targets in T2DM, further high quality studies are needed to fully quantify the problem.

#### **Evidence:**

Khunti K, Ceriello A, Cos X, De Block C. Achievement of guideline targets for blood pressure, lipid, and glycaemic control in type 2 diabetes: A meta-analysis. Diabetes Res Clin Pract. 2018;137:137-48. dx.doi.org/ 10.1016/j.diabres.2017.12.004

#### What is NIHR CLAHRC EM?

NIHR Collaborations for Leadership in Applied Health Research and Care (CLAHRCs) are collaborations between the NHS, universities and local organisations. Our goals are to conduct applied health research across the East Midlands and translate our research findings into improved outcomes for the public.

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