## **Royal College of General Practitioners and Warwick Medical School**

# Annual Education, Research and Innovation Symposium 16<sup>th</sup> June 2016 - Abstract Submission Form

PRESENTER'S DETAILS Session C. Audits			
Title (Prof, Dr, Mr, Mrs)	First Name	Surname	
Mr	Alexander	Hammant	
Department or organisation			
Warwick University Medical School - Student			
Category Audit, Research, Education Project, Innovation Project			
Authors Alexander Hammant Henry Delacave Nick Gould Michelle Wall Jonathon Maxwell	eGFR levels	Title of Study eGFR levels in diabetic mellitus type II patients prescribed metformin, an audit in GP practice.	

## What's the problem you are tackling?

Metformin is commonly prescribed in primary care and is used in treating type II diabetes mellitus. Diabetes can lead to a number of complications, including microvascular changes in the kidneys leading to chronic kidney disease. However, NICE guidelines contraindicate metformin in patients with an estimated glomerular filtration rate (eGFR) less than 30 ml/minute/1.73m² because there is some evidence implying a greater risk of lactic acidosis. This is a contentious issue with arguments that the risk is overemphasised. This audit sought to identify any patients who were regularly prescribed metformin and whether their eGFR levels were appropriate.

#### How did/will you do it?

Abbey House Medical Practice in Daventry had a diabetic register containing 974 patients in 2015. Searches were made to identify those who had had their eGFR measured, those who were taking metformin and then any recorded lactic acidosis episodes. After the searches, any relevant patient notes were identified.

#### What did you find?

Important findings included: only a small percentage of patients on the register were taking metformin when their eGFR levels were recorded as less than 30 ml/minute/1.73m² (0.2%; 2 patients). There were higher numbers of diabetic patients who were not taking metformin in this category (10 compared to 2) suggesting that the NICE guidelines were being broadly adhered to. There were no recorded cases of lactic acidosis.

## Why does this matter?

Although the practice adhered to the NICE guidelines in the majority of cases, there were some patients who did not have their eGFR checked (30/974) and others prescribed metformin despite the absolute contraindication. Although there is debate surrounding the evidence for lactic acidosis risk it is important to protect patients through accepted safe prescribing. This audit helped to identify potential at risk patients and recommend suitable changes.