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## P339 -Diabetes in patients receiving renal replacement therapy – the challenges of using registry data

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### Introduction

Diabetic nephropathy (DN) is the leading cause of end stage kidney disease (ESKD) in the UK – it affected over 25% of adults initiating renal replacement therapy (RRT) between 2010 and 2016, although diagnosis is usually presumptive rather than biopsy-proven. The UK Renal Registry (UKRR) last reviewed diabetes in 2007 – currently, only RRT patients diagnosed with DN as a primary renal disease (PRD) are considered 'diabetic' while RRT patients with diabetes as a comorbidity are grouped with other non-diabetic RRT patients. Furthermore, for RRT patients with DN, there is no differentiation between type 1 and type 2 diabetes. Recent guidelines for diabetic patients on RRT advocate individualised target HbA1c testing and cardiovascular risk modification, highlighting the need to review the data collected by the UKRR.

### Methods

A data completeness exercise was undertaken at a national and renal centre level on all patients commencing RRT, irrespective of whether on dialysis or transplant, between 2010 and 2016 in the 57 renal centres in England and Wales. Patient demographic variables associated with diabetes, PRD and comorbidity data were collected. For patients listed as having DN, HbA1c and measures of cardiovascular risk were also recorded (blood pressure (SBP), cholesterol and smoking).

The presence of any entry in any comorbidity field at the time of RRT start (including 'none') was defined as complete data. For HbA1c, cholesterol and SBP, at least one measure within the first 12 months of starting RRT was defined as complete data.

The number of renal centres attaining a data completeness threshold of 70% was calculated for each variable.

### Results

PRD completeness was good and differentiated between DN due to type 1 and type 2 diabetes, but only half of centres returned comorbidity data on at least 70% of their patients.

Table 1 National data completeness and % renal centres in England and Wales with  $\geq 70\%$  data completeness for 2010–2016, combined for all patients on RRT

For RRT patients with DN, the national data completeness for HbA1c and cardiovascular risk variables remained between 50–80% during 2010–2016.

Figure 1 National data completeness during first year of RRT by year for all renal centres in England and Wales for patients with DN for 2010–2015, with one-year follow-up  
Between 2010 and 2015 only 32 centres (56%) submitted HbA1c data during the first year of RRT for over 70% of patients with DN.

### Discussion

Patients with diabetes are known to have worse outcomes on RRT and guidelines provide audit measures for their care. Poor data completeness, both at national and centre level, limits the ability to identify diabetic patients and to audit their care and outcomes. The frequency of testing of measures of care should

be individualised, but over a quarter of patients known to have DN did not have HbA1c and cardiovascular risk data returned for the first year of RRT.