

Monitoring renal function

in patients with diabetes

sample report



Kidney Disease Management in Patients with Diabetes

ACR mg/mmol	eGFR ml/min/1.732	Kidney disease	Risk	Management
men less than 2.5	greater than 60	none	2-4% per year progress to microalbuminuria	Annual kidney health check (BP, ACR and eGFR).
women less than 3.5				
men greater than 2.5	greater than 30	CKD 1-3	One third progress to overt nephropathy. CVD risk is doubled.	Regular kidney health check plus further investigations depending on CKD stage. Use ACE inhibitor and low dose aspirin. Avoid nephrotoxic drugs
women greater than 3.5				
variable	less than 30	CKD 4/5	Almost all proceed to end stage renal disease (CKD 5) or die prematurely of CVD	Continue intensive management Refer to nephrology

Practice Tips

- It is recommended that people with diabetes and microalbuminuria be prescribed an ACE inhibitor or angiotensin receptor blocker irrespective of their blood pressure reading.
- Kidney damage is associated with an increase in cardiovascular risk and any evidence of kidney damage should prompt intensive management of cardiovascular risk factors.

Note:

Non-diabetic kidney disease is suspected when there is an absence of diabetic retinopathy, there are urinary abnormalities such as haematuria or casts, or when there is reduced eGFR without microalbuminuria or proteinuria.

Notes

1. Data presented in this report is sourced from the NZHIS Laboratory and Pharmaceutical claims database. There is a potential for data entry errors at the pharmacy, laboratory, HealthPAC or NZHIS. All tests associated with an NZMC number will be presented regardless of where you ordered them e.g. your practice, an after-hours clinic or rest home.
2. Data is assigned to you using your NZMC number and patient level is collated using encrypted NHI. Data has been excluded where the NZMC and NHI number was not recorded.
3. This report looks at patients aged between 30 and 70 years prescribed oral diabetic medication during July to December 2007. A prescription for an oral anti-diabetic medication was used as a marker for diabetes, but may include a small number of patients with PCOS. Patients were assigned to you if the oral anti-diabetic medication was prescribed by you. Patients were followed for the next twelve months (2008) to see if they had a creatinine or microalbumin tests. These may have been requested by you or another practitioner.
4. To more accurately reflect diabetic care in the community we have excluded patients who may be cared for by secondary care e.g. less than 30 years old or on insulin.

Dear Dr

This report and audit looks at the monitoring of renal function to detect early chronic kidney disease in patients with diabetes.

Diabetic nephropathy is the most common cause of treated end-stage renal disease.

To detect early chronic kidney disease it is recommended that all people with diabetes have a yearly kidney health check including:

- Blood pressure
- Albumin creatinine ratio (ACR)
- eGFR

National data shows lower rate of testing in Māori patients with diabetes. This is of concern as while Māori have twice the prevalence of diabetes compared with non-Māori, they currently have a 10 times greater prevalence of diabetic end-stage renal disease.

What's happening in your practice?

All the figures below relate to patients prescribed oral anti-diabetic medication aged between 30 and 70 years.

They show the proportion of these patients who have been have NOT had their creatinine and ACR tested during 2008.

Creatinine

xx% of your patients in this group* have NOT had a creatinine test during this period (6 out of 19 patients).

By comparison, xx% of patients in similar practices to yours and 19% of patients nationally have NOT had a creatinine test during this period.

Microalbumin

xx% of your patients in this group* have NOT had a microalbumin test during this period (8 out of 19 patients).

By comparison, xx% of patients in similar practices to yours and 27% of patients nationally have NOT had a microalbumin test during this period.

Do the above results suggest a gap in your practice? If so, you may want to develop a plan to address this gap as part of the clinical audit accompanying this report (see over).

* For more detail on the group of patients included in this report, please see the notes section.

Clinical audit: Monitoring renal function in people with diabetes

Identifying gaps

1. Proportion of patients on oral anti-diabetic medications who have not had a creatinine test is _____
2. Proportion of patients on oral anti-diabetic medications who have not had a microalbumin test is _____
3. Set a target for what you would like this to be, based on evidence for best practice _____
4. What is the gap between target and reported percentage? Creatinine _____ Microalbumin _____

CQI process

Step 1: Check

What may be causing this gap? I.e. what are the barriers to best practice?

Step 2: Make an Action Plan

What intervention(s) can be used to overcome these barriers?

What realistic goals for improvement can be set?

Step 3: Implement your plan

Step 4: Monitoring

Review the action plan at regular intervals with the practice team.

- Is the process working?
- Are the goals for improvement being achieved?
- Are the goals still appropriate?

Claiming MOPS points

This audit has been submitted to the RNZCGP for endorsement as a CQI activity for the allocation of MOPS credits. General practitioners taking part in this audit can claim credits in accordance with the current MOPS programme.

To claim MOPS points you can indicate completion of the audit on the annual claim sheet or alternatively claim through "MOPS online" on the RNZCGP web site.

Retain this document as evidence of participation in the audit.