

Identification of Microalbuminuria in People with Diabetes

Basic Facts

Stage of development

Tested

Potential or current usage

Data extracts have been carried out in 4 practices in relation to this measure, using a query designed by Compass.

Brief overview of the measure

General description

This measure is one of two diabetes indicators that are intended to improve management of diabetic nephropathy in primary care. This measure identifies the proportion of patients with diabetes that are tested annually for microalbuminuria using the albumin/creatinine ratio test.

Rationale for selection

Diabetes is a leading cause of morbidity and mortality in New Zealand[6]. Maori and Pacific peoples have a higher incidence of diabetes and are more likely to die from diagnosed diabetes. Diabetic nephropathy occurs in 20–40% of people with diabetes.[7][7][7][7] Microalbuminuria is the earliest sign of diabetic kidney disease[8]. Ensuring microalbuminuria is identified in new and known patients with diabetes is therefore key to ensuring optimal management of diabetic nephropathy.

Type of measure

Process

Domain(s) of quality

Effectiveness

Application and interpretation of the measure

Stated intent of the measure

Quality improvement tool to assist the practices improve care of people with diabetes by ensuring microalbuminuria is identified in new and known patients with diabetes.

Caveats - Considerations

Caveats Annually screening diabetic for microalbuminuria is best practice and can influence management decisions. Although this measure identifies the proportion of patients with diabetes that are tested for microalbuminuria, it does not take into consideration the characteristics of the populations being serviced. The ability to engage diabetic patients in best practice is influenced not only by practice characteristics, but also by characteristics of the population (service delivery is more difficult in some areas than in others). This measure does not indicate the level of care of either undiagnosed or non-funded people with diabetes Considerations A potential adverse effect is that manipulation of diabetic register is a theoretical possibility which may lead to inaccurate data recording. The indicator is dependant on appropriate diagnosis of people with diabetes within the practice population. The institution of practice activity/systems for follow up of test results and follow up of patients.

Links to other measures

Delay of progression of diabetic nephropathy

Level of health care delivery/setting

Individual practices, although may be applicable to larger groupings of practices

Target population

Patients with diabetes over the age of 12

Stratification by vulnerable populations

If proxy available (i.e. query by quintile), then stratification by ethnicity or socio economic status may be of interest.

Associated incentives

Use of this measure is linked to: • MOPS • Cornerstone

Possible sources of bias or confounding

Level of Integration with national 'Get-checked' programme Patient consent and compliance with advice/laboratory testing/medicines Availability of laboratory services

Calculation of the measure

Output of calculation

Percentage of patients with diabetes tested for microalbuminuria

Numerator description

Patients with diabetes who have had an albumin/creatinine ratio test for microalbuminuria

Numerator exclusions

Patients under 12 years of age, non-funded patients. Patients with terminal illness.

Denominator description

Funded patients over 12 years with diabetes within a general practice

Denominator exclusions

Patients under 12 years of age, non-funded patients Patients with terminal illness.

Time period

One year

Criteria/standard for optimal performance

Diabetic patients should be screened for microalbuminuria annually

Data source

Primary care electronic practice management systems.

Method of extraction

Diabetes: All codes in the diabetes mellitus hierarchy are included, with the exception of codes beginning with C10A (malnutrition-related diabetes mellitus) and C10B (diabetes mellitus induced by steroids). Where a specified code is suffixed with the wild card symbol (*), all codes directly below that code in the hierarchy should also be included. C100* C101* C102* C103* C104* C105* C106* C107* C108* C109* C10y* C10z* C10.00 Screening terms for microalbuminuria DIAP Diabetes Project URINE Microalb/creat ratio Note the current diabetes projects require a screening term for microalbuminuria as part of the assessment.

Key issues and challenges for data management

READ coding of diabetes is a pre requisite, yet there is wide variability Practices can have multiple screening terms set up which can indicate that a patient has been tested for microalbuminuria. The most common one is the diabetes annual review template which includes a field for creatinine ratio. Others across the four practices sampled included screening terms called ALB/CR, XALBUM, ALB/C and URINE. Given the variability across just four practices it is apparent how many different terms will be in use across the country. This means it would difficult to write a standardised query that could be run at any practice to identify those with a albumin/creatinine ratio test result recorded. Given the high degrees of variability in coding, it would be difficult to write a standardised query that could be run at any practice to identify those with an albumin/ creatinine ratio test result recorded. It may be possible to build a specifi extraction tool into a PMS. This would require practices to maintain the 'mapping' of the screening terms they use. If data is to be aggregated it is necessary to ensure consistent data capture of both READ codes and screening for microalbuminuria. Currently diabetic projects require the analysis of microalbuminuria but the coverage of these programs is variable. - See more at: <https://www.hqmnz.org.nz/measures/staying-healthy/identification-of-microalbuminuria-in-people-with-diabetes#sthash.ymVFdhKA.dpuf>

Appraisal of the measure

Availability of evidence to support application of the measure

Measure is formulated on and underpinned by evidence from a published systematic review, meta-analysis, or other peer-reviewed synthesis of clinical evidence relating to the area of focus., The measure has been reviewed using the Sieve Tool and a report is available.

Evidence of feasibility and reliability of implementation

Validity - The measure has been demonstrated to be valid (i.e. it measures what it purports to).

Development approach

Measure defined and feasibility of implementation has been tested. This measure is part of a suite of 11 measures the WSoM developed[1]. The process followed to develop this set of measures is summarized below: 1. Priority areas for measure development were identified in consultation with the College, MoH, PPP and the wider primary health care sector. 2. A measure development template was devised, based on a measure appraisal tool (the sieve). 3. The template was populated and specifications for each measure were refined through discussions. 4. Generic implementation plans were developed. Compass field tested indicator on a sample of four practices[2].

Other items

Owner details

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Owner (Organisation name)

Royal New Zealand College of General Practitioners

Owner (Email contact)

jane.o'hallahan@rnzcgp.org.nz

Creator (Organisation name)

Primary Health Care Quality Research Unit, Wellington School of Medicine and Health Sciences, University of Otago

Creator (Email contact)

roshan.perera@otago.ac.nz