### Measure Title
MONITORING FOR DIABETIC NEPHROPATHY

### Disease State
Diabetes

### Indicator Category
Monitoring

### Strength of Recommendation
B

### Quality of Evidence
Fair

| I, III |

### Physician Specialties
Primary: Family Practice, General Practice, Internal Medicine, Mixed Specialty

### Disease Burden
- Diabetes is the leading cause of end-stage renal disease (ESRD), accounting for 44 percent of new cases. In 2001, over 42,000 people with diabetes began treatment for ESRD and over 142,000 people with ESRD due to diabetes were living on chronic dialysis or with a kidney transplant.[1]

### Reason for Indicated Intervention or Treatment
- Evidence supports that screening and early treatment for diabetic nephropathy is associated with a reduced risk and decreased rate of progression to ESRD.[2, 3] In addition, micro-albuminuria is a well-established marker of increased CVD risk.[4]

### Evidence Supporting Intervention or Treatment
- Detection of nephropathy in its earliest stages affords the opportunity to provide patients with effective treatments to slow the progression of renal disease. For example, at least one large prospective randomized trial provided evidence that adequate blood pressure control can reduce the development of severe renal disease.[5] In addition, several large prospective randomized trials have demonstrated that reduction of blood pressures specifically with ACE inhibitors provides a selective benefit over other classes of anti-hypertensive medications in delaying the progression from micro- to macro-albuminuria and can slow the decline in glomerular filtration in patients with macroalbuminuria.[5-8] Further support for use of ACE inhibitors in patients with diabetes and micro-albuminuria was provided in another trial which demonstrated the ability of this class of medication to reduce severe CVD.[9]
- Experts suggest that managing urine micro-albumin to maintain normal or near normal range may improve renal and cardiovascular prognosis; this approach has not been formally evaluated in prospective trials.[10]

### Clinical Recommendations
- The American Diabetes Association, the American Board of Family Practice and the Centers for Disease Control and Prevention all recommend annual screening of diabetics for micro-albuminuria to allow early identification of patients with nephropathy.[11]

### Comparative Baseline Data
Health Benchmark's 2004 average plan rate across all existing clients was 45%.
Denominator
Continuously enrolled members aged 18 to 75 years by the end of the reporting period who were identified as having diabetes during the reporting period or year prior.

Denominator Exclusion
Members with a diagnosis of polycystic ovaries (at any time in the member’s history) who did not receive a diagnosis of diabetes during the reporting period or year prior, or members diagnosed with gestational diabetes or steroid-induced diabetes during the reporting period.

Numerator
Members who were screened for diabetic nephropathy or who had evidence of treatment for or diagnosis of diabetic nephropathy during the reporting period.

Interpretation of Score
High score implies better performance.

Physician Attribution
Score all physicians (in the selected specialties) who saw the member during the reporting year.

Source
Health Plan Employer Data and Information Set (HEDIS®) 2005 Technical Specification

External Files
Required for Analysis
Denominator file name: Diabetes_den_medlist_2005.xls

References
1 **Indicator Category** (Adapted from Health Plan Employer Data Information Set (HEDIS®) technical specifications and U.S. Preventive Services Task Force (USPSTF) Methodology)

**Effectiveness**

**Primary Prevention Measures:** Those that are applicable to individuals who are asymptomatic and are designed to prevent the onset of the targeted condition (e.g. immunizations);

**Secondary Prevention Measures:** Those that are applicable to asymptomatic patients who have risk factors or pre-clinical disease but in whom the condition has not become clinically apparent (e.g. pap smears, screening for elevated blood pressure);

**Tertiary Prevention Measures:** Those that are applicable to individuals who are diagnosed with a condition and are part of the treatment or management of patients with that condition (e.g. cholesterol reduction in patients with diabetes).

2 **Strength of Recommendation** (Based on U.S. Preventive Services Task Force (USPSTF), 3rd Edition Criteria)

- **A** It is strongly recommended that clinicians provide the service to eligible patients. *There is good evidence that the service improves important health outcomes and that benefits substantially outweigh harms.*

- **B** It is recommended that clinicians provide the service to eligible patients. *There is at least fair evidence that the service improves important health outcomes and that benefits outweigh harms.*

- **C** Evidence is insufficient to assess the effects on health outcomes because of limited number or power of studies, important flaws in their design or conduct, gaps in the chain of evidence, or lack of information on important health outcomes.

- **D** It is recommended that clinicians DO NOT routinely provide the service to eligible patients. *There is at least fair evidence that the service is ineffective or that harms outweigh benefits.*

- **I** The evidence is insufficient to recommend for or against routinely providing the service. *Evidence that the service is effective is lacking, or poor quality, or conflicting, and the balance of benefits and harms cannot be determined.*

3 **Quality of Evidence** (Based on U.S. Preventive Services Task Force (USPSTF), 3rd Edition Criteria)

- **Good:** Evidence includes consistent results from well-designed, well-conducted studies in representative populations that directly assess effects on health outcomes.

- **Fair:** Evidence is sufficient to determine effects on health outcomes, but the strength of the evidence is limited by the number, quality, or consistency of individual studies, generalizability to routine practice, or indirect nature of the evidence on health outcomes.

- **Poor:** Evidence is insufficient to assess the effects on health outcomes because of limited number or power of studies, important flaws in their design or conduct, gaps in the chain of evidence, or lack of information on important health outcomes.

**Quality of Evidence** (Based on U.S. Preventive Services Task Force (USPSTF), 3rd Edition Criteria)

- **I:** Evidence obtained from at least one properly randomized controlled trial.

- **II-1:** Evidence obtained from well-designed controlled trials without randomization.

- **II-2:** Evidence obtained from well-designed cohort or case-control analytic studies, preferably from more than one center or research group.
II-3: Evidence obtained from multiple time series with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of the introduction of penicillin treatment in the 1940s) could also be regarded as this type of evidence.

III: Opinions of respected authorities, based on clinical experience descriptive studies and case reports or reports of expert committees.