



Medical Assistance Division Medicaid Drug Utilization Review Newsletter

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Comprehensive Care for the Treatment of Type 2 Diabetes

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Diabetes is a chronic illness that requires continuing medical care and patient self-management. While glycemic control is fundamental to the management of diabetes, complete diabetes care is complex and goes beyond treatment of hyperglycemia. Preventive therapies and aggressive treatment of co-morbidities and risk factors for long-term complications are as much a part of a comprehensive diabetes care plan as is glycemic control. The American Diabetes Association (ADA) has developed standards of care and recommendations for therapeutic actions that are known or believed to favorably affect health outcomes of patients with diabetes.¹ Unfortunately, these therapies are often underutilized.

Lifestyle Changes

Lifestyle changes include medical nutrition therapy and physical activity. Each patient should have a registered dietician develop an individualized nutrition therapy plan. General dietary recommendations include limiting the intake of saturated fats, *trans* fat and cholesterol and monitoring carbohydrate intake. These changes in diet can increase weight loss which, in turn, decreases insulin resistance. This will help achieve glycemic control and reduce the risk of cardiovascular disease (CVD). Additionally, patients with diabetes should perform at least 150 minutes per week of moderate-intensity aerobic exercise and resistance training three times per week. Regular exercise has been shown to improve blood glucose control, reduce cardiovascular risk factors, contribute to weight loss, and improve well-being.¹

Metformin

A consensus statement on the management of hyperglycemia in individuals with type 2 diabetes was published by the ADA and the European Association for the Study of Diabetes in 2006.² These organizations recommend initiating metformin in combination with lifestyle changes at diagnosis. This recommendation is based upon its ability to lower hemoglobin A1C, the absence of weight gain or hypoglycemia, a generally low level of side effects, and a relatively low cost.^{1,2} Metformin is contraindicated in patients with renal disease, renal dysfunction, and acute or chronic metabolic acidosis, including diabetic ketoacidosis. Metformin should also be avoided in patients with heart failure that requires drug treatment, hepatic disease, and conditions associated with hypoperfusion and hypoxemia because of an increased risk of lactic acidosis.³

Angiotensin-Modulating Agents

Angiotensin-converting enzyme (ACE) inhibitors and angiotensin receptor blockers (ARBs) have been shown to improve cardiovascular outcomes in high-risk patients, as well as delay the progression of nephropathy in patients with diabetes. The ADA guidelines recommend that all patients with diabetes and hypertension be treated with either an ACE inhibitor or an ARB in the absence of contraindications.¹ The Kidney Disease Outcomes Quality Initiative (KDOQI) Clinical Practice Guidelines and Clinical Practice Recommendations for Diabetes and Chronic Kidney Disease recommend the use of an ACE inhibitor or an ARB for reducing albuminuria and delaying kidney disease progression in patients with diabetes regardless of blood pressure level.⁴ Renal function and serum potassium should be monitored in all patients receiving an ACE inhibitor or an ARB. If a patient is unable to tolerate an ACE inhibitor (e.g. due to cough or angioedema), substitution with an ARB is recommended. ACE inhibitors and ARBs should be avoided in pregnant patients.⁵

Statin Therapy

Patients with type 2 diabetes are at a high risk of cardiovascular disease (CVD). The National Cholesterol Education Program (NCEP) recognizes that diabetes confers a risk of CVD equivalent to that in patients who have had a myocardial infarction.⁶ In analyses of diabetic subgroups in large outcomes studies and large trials specifically in subjects with diabetes, statin therapy has been effective in both primary and secondary prevention of CVD events, including coronary heart disease deaths. Current ADA guidelines recommend statin therapy in addition to lifestyle modifications, regardless of baseline lipid levels, for diabetic patients with overt CVD and for those who are over the age of 40 and have one or more other CVD risk factors. For lower risk patients, statin therapy should be considered if LDL cholesterol is greater than 100 mg/dl or in the presence of multiple CVD risk factors.¹ Statin therapy is contraindicated in active hepatic disease, unexplained, persistent elevations in serum transaminases, pregnancy, and when nursing.⁵

Antiplatelet Agents

Antiplatelet agents decrease platelet aggregation and inhibit thrombus formation. Aspirin, clopidogrel, ticlopidine, dipyridamole, and dipyridamole/aspirin have been evaluated for prevention of thrombotic cerebrovascular and cardiovascular events.⁵ In many trials aspirin therapy resulted in an approximate 30% decrease in myocardial infarction and a 20% decrease in stroke in a wide range of patients. Clopidogrel therapy has been associated with a reduction in CVD rates in diabetic patients. The ADA recommends low dose aspirin (75-162 mg daily) for secondary prevention in diabetics with a history of CVD and as primary prevention for diabetics at increased cardiovascular risk, including those who are over 40 years of age and have additional risk factors. Other antiplatelet agents may be alternatives for patients who are not candidates for aspirin therapy, i.e. patients under the age of 21 years, those with an allergy to aspirin, those with a bleeding tendency or receiving anticoagulant therapy, and patients with active liver disease or who have had a recent gastrointestinal bleed.¹

Influenza and Pneumococcal Vaccinations

Influenza and pneumonia are associated with high mortality and morbidity in people with chronic diseases. Diabetic patients may be at increased risk for developing severe complications from influenza and the bacteremic form of pneumococcal infection.¹ In a case-control series

influenza vaccine was shown to reduce diabetes-related hospital admission by as much as 79% during flu epidemics.⁷ The ADA recommends that all diabetic patients 6 months of age or older receive an annual influenza vaccine. The ADA further recommends at least one lifetime pneumococcal vaccine for adults with diabetes.¹

Incorporating the above therapies into a diabetes care management plan can result in improved outcomes, prevention or delay of long-term complications, and increase in quality of life in patients with diabetes.

References

1. American Diabetes Association. Standards of medical care in diabetes – 2008. *Diabetes Care* 2008;31(Suppl1); S12-S54.
2. American Diabetes Association and European Association for the Study of Diabetes. Management of hyperglycemia in type 2 diabetes: a consensus algorithm for the initiation and adjustment of therapy. *Diabetes Care* 2006;29 (8):1963-72.
3. Bristol Myers Squibb. Glucophage XR (metformin hydrochloride extended-release tablets) prescribing information. Princeton (NJ):2006.
4. National Kidney Foundation. Kidney Disease Outcomes Quality Initiative (KDOQI) clinical practice guidelines and clinical practice recommendations for diabetes and chronic kidney disease. *Am J Kid Disease*; 2007;49 (2):Supplement 2.
5. Clinical Pharmacology [database online]. Tampa, FL: Gold Standard, Inc.; 2008. URL: <http://cp.gsm.com>. Updated October 2007.
6. Executive Summary of The Third Report of The National Cholesterol Education Program (NCEP) Expert Panel on Detection, Evaluation, and Treatment of High Blood Cholesterol In Adults (Adult Treatment Panel III). *JAMA*. 2001;285:2486 - 2497.
7. Colquhoun et al. Effectiveness of influenza vaccine in reducing hospital admissions in people with diabetes. *Epidemiology Infect* 1997;119:335 - 341.

Activities of the DUR Board

At the January 2008 meeting the Board discussed several potential interventions for consideration during 2008. Four retrospective interventions were recommended and approved as follows:

1. Controlled Substance Overutilization – the purpose of this intervention is to identify over-utilization of drugs that are most often implicated in prescription abuse. The criteria include those fee-for-service Medicaid recipients who received nine or more controlled substance prescriptions over a 90 day period. Patients receiving care at Indian Health Service facilities were excluded since the IHS does its own drug utilization review. Prescriptions with a quantity of less than 12 dosage units were also excluded. As of this writing, letters have gone out to providers whose patients fit the criteria above, and results of this intervention will be included in the next newsletter.

2. Type 2 Diabetes Mellitus Disease Management – the focus of this intervention will be to determine opportunities for improving the quality and safety of drug therapy for diabetics following the 2008 clinical practice recommendations published by the American Diabetes Association. Performance indicators will include underutilization of angiotensin modulating therapies (i.e., angiotensin converting enzyme inhibitors and angiotensin receptor blockers) and

underutilization of antilipemic therapy with statins. More details on this intervention will be available later this year.

3. Migraine Drug Treatment Overutilization - the Board reviewed a utilization report with the threshold set at use of over nine units (doses) of the triptan drugs in a 30-day period (both oral and parenteral). Patients using more than nine units of the triptans in a 30-day period should be considered for prophylactic treatment with other agents. This intervention will be carried out later in 2008.

4. Psychotropic Polypharmacy – the purpose of this intervention is to simplify atypical antipsychotic drug regimens and decrease the incidence of duplicate atypical antipsychotic prescribing. Many of the Medicaid recipients who are treated with these drugs are in nursing rehabilitation facilities. The Board noted that this intervention will reinforce the duplicate therapy guidelines established by ValueOptions New Mexico (The Behavioral Health Collaborative statewide entity) in November 2006. Details of this intervention will be provided later in 2008.

New Mexico Medicaid Subscribes to Electronic Prescribing

New Mexico Medicaid is excited to announce that it has completed technical developments to deliver real time eligibility and formulary data to physicians participating in e-prescribing. E-prescribing providers will also be able to access medication history in the near future. This data is available for the New Mexico Medicaid Fee-For-Service client population.

If you are a Medicaid provider that utilizes electronic prescribing, make sure that your software is accessing this data so that you realize the full benefit. If you have any questions, please contact Mark Zuliani, Transformation Grant Project Manager, at 505-827-3162.

To report medical fraud, contact the Medicaid Quality Assistance Bureau.
NMMedicaidFraud@state.nm.us or (505) 827-3100 or (505) 827-3185

We appreciate your continued support of our efforts to encourage quality care for our Medicaid clients. Questions and/or comments about this newsletter may be directed to John Erb, Pharm.D. at (505) 827-3129 or johnn.erb@state.nm.us