Changing Practice to Reduce Diabetes Complications

Retinopathy

Diabetes can lead to costly and debilitating complications, including retinopathy which can cause vision loss and blindness.

- Treating diabetic eye disease with laser therapy can reduce the development of severe vision loss by up to 60%. (CDC, 2011)
- People with diabetes who received guideline-recommended care had substantially reduced low vision/blindness. (Sloan, 2009)

Changing health systems and provider practices benefits people with diabetes:

- **Interventions based on the Chronic Care Model** (see below) improved at least 1 process or outcome measure for people with diabetes in primary care practices. (Bodenheimer, 2012)
- **Use of electronic health records** (EHRs) led to higher achievement of care & outcome standards for patients with diabetes than using paper records - including receipt of a recommended eye exam. (Cebul, 2011)
- **Achieving NCQA patient-centered medical home recognition** led to significant improvement in the percentage of patients with diabetes who received evidence-based complications screening. (Gabbay, 2011)
- **Involvement of non-physician providers** such as pharmacists, case managers, and community health workers is strongly supported as a way to improve diabetes outcomes. (NIH, 2011)

Diabetes and Retinopathy

People with diabetes have medical expenses more than twice as high as people without diabetes. (CDC)
- Diabetes-related blindness costs the U.S. about $500 million a year. (U.S. Renal Data System)
- Vision loss is also associated with depression and social isolation. (CDC)

**Chronic Care Model Components** (www.improvingchroniccare.org)

- Health care organization
- Delivery system design
- Clinical information systems
- Self-management support
- Decision support
- Community resources and policies

The Chronic Care Model is an effective framework for practice redesign.
How Can Providers Assure Quality Care Related to Major Complications for People with Diabetes?

- Assess A1C 2 to 4 times a year
- Assess and control blood pressure and blood lipids
- Consider self-monitoring for blood pressure, especially for those with poorly controlled hypertension.
- Assure receipt of annual dilated eye exams and foot exams, appropriate immunizations and other preventive services
- Assess weight; recommend physical activity, healthy diet and medical nutrition therapy as appropriate
- Review, adjust and/or administer medications
- Promote self-management training
- Assess smoking status and advise smokers to quit
- Provide psychosocial assessment; refer to a mental health specialist familiar with diabetes, as appropriate
- Assess urine albumin & albumin/creatinine ratio (ACR) and estimated glomerular filtration rate (eGFR) annually

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Comprehensive Guidelines for Diabetes Management

- **American Diabetes Association**
  Standards of medical care in diabetes-2013

- **American Association of Clinical Endocrinologists**
  AACE Medical guidelines for clinical practice for developing a diabetes mellitus comprehensive care plan

- **American Academy of Ophthalmology**
  Diabetic retinopathy

- **Task Force on Community Preventive Services**
  www.thecommunityguide.org/diabetes

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Download fact sheets & references from the NACDD Diabetes Council web pages at [http://www.chronicdisease.org](http://www.chronicdisease.org). Click on Diabetes, then Resources/Tools.

This publication was supported by Grant/Cooperative Agreement Number U58DP002759-01 from the Centers for Disease Control and Prevention ("CDC"). Authors acknowledge the contribution of the National Association of Chronic Disease Directors (NACDD) to this publication. Its contents are solely the responsibility of the authors and do not necessarily reflect the official views of the CDC or NACDD.

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