



Keeping Diabetes At Bay

While many long term care patients are at high risk of developing diabetes, the disease can often be prevented or slowed through a proactive screening process.

ALTHOUGH THE MAJORITY OF nursing facility patients who suffer from diabetes are diagnosed prior to entering a facility, this is not always the case. The risk of Type 2, or late onset, diabetes (when the pancreas does not produce enough insulin or the body has become insulin-resistant) increases with age, which makes the long term care environment a potential hotbed for new cases. Consequently, proactive long term care administrators and managers are beginning to look at practical measures for screening patients and testing those identified as high risk.

According to "Diabetes Management in Long Term Care" (American Medical Directors Association, 2003), the cost of caring for patients with diabetes in extended care facilities has reached \$6 billion annually, and the disease can have dramatic and debilitating effects on a person's health, including the risk of impaired vision, hypertension, dehydration, foot ulcers, neuropathy (nerve damage), nephropathy (kidney damage), repeated infections, cardiovascular problems, and retinopathy (damage to the retina of the eye). With the National Center for Health Statistics estimating that one in three Americans will develop diabetes during their lifetime, it is in the best interest of nursing facilities and their patients to have a structured program in place to identify and help those at risk.

Developing A Program

Developing a comprehensive program for diabetes prevention must begin

with a thorough review of a facility's current policies and procedures, followed by a determination of which procedures should be implemented or modified. Other key components of a comprehensive program include:

- Screening patients during annual physical examinations for hyperglycemia (elevated levels of blood glucose), which could signal a pre-diabetes condition.
- Careful evaluation of patients identified as high risk, including appropriate lab tests for levels of blood glucose, glycated hemoglobin (HbA_{1c}), fructosamine, and insulin, as well as the HOMA (Homeostasis Model Assessment).
- Assessment of general nutrition for all patients, with specialized, prevention-oriented diets for patients identified in the pre-diabetes range.
- Implementation of a weight-loss program for individuals who are overweight or obese.
- Encouragement to maintain appropriate weight and diet.
- Adequate and appropriate exercise and physical activity programs.
- Education of staff, patients, and families.
- Ongoing staff focus on recognizing and watching for signs and symptoms, such as weight loss or gain, periodontal disease, excessive or frequent skin ulcers, and infections or delayed wound healing.

The Practice Of Prevention

DuPage County Convalescent Center in Wheaton, Ill., is one facility that is geared toward slowing down or pre-

venting the onset of diabetes within its geriatric population. The facility has established various policies, procedures, and check lists for nurses, physicians, and other staff members to follow, including:

- Pre-admission and annual physical examination by a physician for every patient, including a full blood workup and urinalysis.
- Tracking patients' meal consumption by recording dietary intake and keeping nursing notes on what patients eat or refuse to eat. This is used to monitor the food intake of anyone with symptoms or who is classified as pre-diabetes.
- Keeping hypoglycemia/hyperglycemia check lists to provide educational and procedural guidelines in the identification and treatment of low or elevated blood glucose. This assessment is conducted when an individual shows signs or symptoms of nondrug-induced hypoglycemia or hyperglycemia (typically due to exercise or not eating).
- Conducting monthly nutritional audits to monitor the clinical nutrition staff's accuracy and timely completion of documentation. The administrative dietitian audits the medical records of 12 randomly selected patients who have been identified with newly discovered pressure ulcers, have experienced hyperglycemia/hypoglycemia

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during the month, or have shown a significant monthly weight change. Results are reported to the dining services manager, and any consistent problems are then addressed through inservices.

- Conducting joint policy and procedure sessions between nursing and dietary staff to monitor and track what patients are eating and who is either gaining or losing weight, because weight control is a major focus of diabetes prevention efforts.

- Nutritional care guidelines for high-risk patients to ensure that those at risk will receive timely and appropriate nutritional intervention. Nursing staff notifies dining services of anyone who has experienced hypoglycemia/hyperglycemia, nausea, diarrhea, vomiting, or significant weight loss or gain. Appropriate lab tests are performed, including albumin and cre-

atin levels. Clinical nutrition staff follow up within 72 hours to reevaluate the patient's condition and recommend an appropriate intervention.

- Risk factors consultation to ensure that physicians are notified of any symptoms or problems that are identified during the nursing staff's quarterly assessment of the patients.

- Periodic foot examinations conducted by the nursing staff on admission and on a quarterly basis to look for any problems that point to diabetes or diabetes complications so that the podiatrist can be brought.

- Weight-control program and consultations conducted by nursing staff and physicians to ensure that every patient is weighed at least monthly. Those whose weight fluctuates by 5 percent or more are then counseled and assisted in getting their weight under control through dietary modifi-

cations, physical therapy, and exercise.

- Exercise consultations, which may involve physicians, nursing staff, and therapy staff, working together with the weight-control program to ensure that patients are given appropriate exercise programs to meet their needs.

In addition to these checklists and procedures, DuPage sponsors a community education program at several area hospitals where clinical diabetic educators provide educational programs for the general public. Blood glucose screenings, dietary intake guides, and foot examinations are offered, as well as information on diabetes, prevention of the disease, and what to do when diagnosed with diabetes.

Overcoming Challenges

There are many good reasons for establishing a prevention-oriented

approach, including the health of the patients and the potential monetary savings that result when fewer patients need to travel back and forth to the hospital due to diabetes complications. However, nursing facilities may face several challenges when developing these programs.

Problems that are common to the elderly in the long term care environment—cognitive issues, poor nutrition, depression, and multiple medical conditions, for example—can make screening, evaluating, and treating pre-diabetes difficult.

For example, one DuPage patient with cognitive impairment needed counseling and behavior modification to lose 50 pounds. He had a tendency to hoard food, so the dietitians and social services and nursing staff worked together to help him change his behavior and lose the weight in a year's time.

An ongoing follow-up will be needed to help him maintain his behavior and weight.

The vast number of government and industry guidelines, regulations, and audits pose another challenge. In addition, many facilities may not have a registered dietitian to assist with meal planning or may have other staffing issues such as a high nursing turnover. For others, because these types of programs are generally not reimbursable, the costs involved in testing and monitoring may deter them from creating and implementing a prevention-type program.

One solution might be to assess current policies and procedures and implement or enhance in small steps where it can be done cost effectively. That could mean simply modifying the annual physicals and any other screening efforts to include an awareness of

diabetes signs and symptoms, encouraging more patient participation in exercise and physical activity, and improving staff education. ■

For More Information

- Hypoguard can be reached at (800) 818-8877 or via e-mail at info@hypoguard.com.

Internet sites of interest include:

- The American Diabetes Association, www.diabetes.org/cpr;
- The American Medical Directors Association, www.ama.com;
- The Centers for Disease Control and Prevention, www.cdc.gov/diabetes/faq/index.htm;
- The Food and Drug Administration, www.fda.gov/diabetes;
- The International Diabetes Center, www.idc.com.