Dear Dr. Jeff

As the new director of food service at my nursing home and a registered dietitian, I have tried to introduce modern concepts of diabetic care into my menus, including liberalized food choices and calorie allowances for residents and elimination of “diabetic snacks” at bedtime, only to face overwhelming opposition from many attending physicians and (to my surprise) the nursing staff. I am required to provide diets in accordance with physician orders. What do you suggest?

Dr. Jeff responds: The quality of geriatric care in long-term care facilities far exceeds that of hospitals and most community physicians. In the 1980s and 1990s, nursing homes led the way in removing physical restraints, eventually convincing The Joint Commission to bring these advances into the hospital setting. By 2000, most long-term care physicians and nonphysician practitioners were aware of the limited utility of feeding tubes for patients with advanced dementia, a message backed by abundant scientific evidence that nevertheless still has not filtered through to the typical hospitalist.

In the past 5 years, there has been a dramatic decrease in the use of antipsychotic medications to treat the behavioral complications of dementia, but primarily in long-term care settings, where consulting pharmacists and federal regulators, with support from AMDA and other stakeholders, have pressed for change. Again, the evidence was available in multiple articles in major journals, and the Food and Drug Administration demanded “Black Box” warnings on these drugs by 2005. But even experts’ endorsement of nonpharmacologic approaches to dementia behaviors produced little effect until regulators began to give “unnecessary drugs” citations to facilities that inadequately documented a compelling need for these medications.

Yet here, too, the hospital and community standards of care lag far behind the nursing home level. As these examples demonstrate, you should not be discouraged that your facility is hesitant to introduce evidence-based practices and the recommendations of experts. Resistance to your proposals is certainly not confined to your facility or to long-term care in general. Indeed, the hope for change is excellent where you are, if approached properly and with some patience.

Unfortunately, the precise apportioning of calories throughout the day comes not simply from nutritional ignorance, but from an overall misunderstanding of quality diabetic care for frail seniors. The old diets were part of diabetic care that carefully timed measurements of blood sugar and corresponding insulin injections to produce serum glucose and glycohemoglobin levels as near the normal range as possible, all day long.

In addition, the unsubstantiated belief that complex carbohydrates are metabolized much slower than simple sugars led to strict prohibitions against them, lest sudden increases in blood sugar endanger tight control. Weight loss was believed to decrease insulin resistance and thus control elevated blood sugars. Yes, there is some scientific evidence that regimens like this may decrease some long-term complications of diabetes, particularly diabetic neuropathy. But, as you well know, most of our residents don’t need a care plan to limit complications over decades.

Not in Isolation

Although the dietary reforms you propose are highly desirable on their face, they should really be part of an overall facility commitment to modern diabetic care. Without that, your liberalized diet’s higher calories will simply lead to more finger sticks and more insulin injections. Although improved nutrition and a better quality of life (eating should be fun) are desirable goals in themselves, they will be resisted if the care team doesn’t understand how they fit into overall care plans and resident goals of care.

One of the responsibilities of the medical director in a nursing home is to review resident care policies. Note that this does not read “medical care policies.” Rather, all policies related to resident care are this person’s bailiwick. Certainly, the lineup of available diets within the facility falls into this category. Thus, one first step would be to review your plans with the medical director and get him or her as an ally.

Many facilities have removed the old American Diabetes Association diets from the list of those available in the dining hall. Attending physicians who try to order a 1,200 calorie–ADA diet are simply told that it is not available. But most physicians, nonphysician practitioners, and patients will happily accept a caring facility’s idea of a more liberal “diabetic diet.”

Even better would be to encourage your facility’s Quality Assessment & Assurance Committee to examine the interdisciplinary management of diabetes mellitus. The first step should be to explore the goals of care. We now understand that the management of diabetes in the elderly, as with so many chronic diseases, is largely palliative. The key outcomes are the prevention of symptomatic hyperglycemia and of symptomatic or asymptomatic hypoglycemia.

Eligible residents with dizziness, weakness, or increased confusion may easily have these symptoms of hypoglycemia ignored or attributed to multiple other medical conditions common in this population. But hypoglycemia is extremely dangerous for the elderly as it may, even when corrected, accelerate the process of cognitive impairment. Moreover, multiple large-scale clinical trials have found tight-control hypoglycemia a strong predictor of cardiovascular mortality.

The American Diabetes Association, the American College of Cardiology, the American Heart Association, and the American Geriatrics Society have all opposed tight control for frail seniors, but many members of the medical community (and even some endocrinologists) have failed to change their practices. Even clinical laboratories will report a glycohemoglobin level of 8.5 as “high” or “very high” (prompting an urgent call to a practitioner) when it might be a perfectly desirable value for a nursing home resident.

An average glucose of about 200 mg/dL during the day, fasting blood sugars of 100-180 mg/dL, and bedtime values of 110-200 mg/dL are protective against hypoglycemia while remaining below the renal threshold at which glucose spills into the urine. Remember that glycohemoglobin levels are falsly elevated when red blood cell turnover is decreased by nutritional deficiency anemia or significant renal insufficiency. They are falsely low in patients with high red blood cell turnover, such as from a recent transfusion, hemolytic anemia, or dialysis with erythropoietin.

A 2013 study in the Journal of the American Geriatrics Society found that 73% of diabetic nursing home residents were on sliding-scale-insulin regimens, including 68% who had received no baseline insulin injection. But complex sliding-scale regimens (“2 units for glucose above 180” etc.) chase their own tails, plotting future treatment in reaction to where the sugar level was in the past. Thus, the resident who had an unusually large lunch followed by a nap is treated with insulin before the dinner she skips because she is full! Due to the highly variable appetites and inadequate exercise levels of most nursing home residents, regimens that predict behavior patterns place residents at risk.

Change Will Come

As with physical restraints and antipsychotic drugs, pressure from state surveys may force improved diabetic care. Fear of citations for weight loss has encouraged facilities to liberalize caloric intakes for diabetic residents. Moreover, any weight loss assumed to be achieved by caloric control may simply be acceleration of sarcopenia, osteoporosis, and frailty with declining muscle mass (leading to worse glycemic control).

Although surveyors are reluctant to cite deficiencies in diabetic care under “medical services,” citations have been increasing for sliding-scale insulin under “unnecessary medications.” Moreover, simple arithmetic dictates that following clinicians’ regular insulin sliding scale orders can place a facility at risk under multiple other categories, as well.

If one-third to one-half of nursing home residents are diabetic and more than half of them require the floor nurse to check their blood glucose before meals, that implies that on a 40-bed unit there will be somewhere between 7 and 14 different measurements needed nearly simultaneously. Since many of the residents are pressing to go into the dining room, the potential for error or omission is enormous, as is the risk for lapses in proper procedures, including infection control.

If the flow sheets show frequent coverage without evidence of physician notification, surveyors may question the quality of nursing communication regarding changes in status. Also, for resident dignity, each resident must be tested in his or her room, with the door or curtain closed, and receive the injection there as well. An insulin injection in the dining room or hallway, if witnessed by a surveyor, is a certain deficiency.

As you are absolutely right to want to improve the quality of life for your residents. Besides the recommendations of your professional organizations, you should look for support from medical organizations, including the well-researched and thoughtful consensus report published in 2012 by the American Geriatrics Society and the American Diabetes Association.

AMDA’s clinical practice guidelines, including “Diabetes Management” (www.amda.com/tools/guidelines.cfm#diabetes), are designed to help nursing homes address these issues in our special context. Meaningful change in long-term care requires both a champion and the support of the entire interdisciplinary team.

By Jeffrey Nichols, MD

The End of Life Should Be Sweet, So Let Them Eat Cake

Dear Dr. Jeff:

As a long-time member of AMDA’s Advisory Board. Comment on this and other columns at www.caringfortheages.com under “Views.”

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