

# Lessons Learned from the Diabetes Master Clinician Program

**Reaching Goals:** *It's as Easy as A1C, Blood Pressure and LDL Cholesterol!* Your FAFP Foundation at Work Edward Shahady, MD Medical Director Diabetes Master Clinician Program Florida Academy of Family Physicians Foundation

Excellent studies (1, 2) indicate that lowering A1C below 7 and LDL below 100 reduces the incidence of retinopathy, nephropathy, neuropathy, stroke and cardiovascular disease. Other studies indicate that patients who know their actual laboratory values and understand their significance will achieve better overall management of their diabetes. (3) The American Diabetes Association (ADA) has set the goals for quality diabetes management at goals of an A1C of  $\leq 7$ , LDL  $\leq 100$  and blood pressure of  $\leq 130/80$ . Unfortunately the majority of patients are not successful in achieving these goals. Only 30 to 35% of diabetic patients nationally are reaching any of the ADA quality indicators individually and only 7% achieve goal in all three indicators at the same time. (4) A reduction in the morbidity and mortality associated with diabetes is not possible more patients achieving goal for all diabetes quality indicators.

Diabetes is the fifth leading cause of death in the US; the leading cause of kidney failure, non-traumatic limb amputations and blindness; and the leading contributor to cardiovascular disease. The economic and emotional burden associated with diabetes is enormous and will not decrease without an increase in the number of patients achieving diabetes quality goals. Goal achievement is enhanced in systems that emphasize early recognition and treatment of diabetes. Unfortunately, current systems of clinical care and medical education emphasize care in the later stages of the disease. Newer systems are needed to effectively address this issue. A major shift in the way we care for patients and teach is crucial to reduce the burden of suffering associated with diabetes. (5)

Responding to the challenge of creating a new system of clinical care and medical education the Florida Academy and its foundation created the Diabetes Master Clinician Program (DMCP) in November of 2003. The program uses small group teaching techniques and visits to the clinicians' offices to train clinicians and their staff to conduct diabetic group visits and use an Internet-based disease registry. Group visits

are more effective than individual office visits. They provide an environment for group education, patient sharing of solutions and more time for the clinician to be with the patient. The registry is an innovative electronic tool that enhances individual and population patient management. The registry produces individual patient report cards that inform patients of the reasons for diabetes goals and their level of goal achievement. Clinicians and staff use the report cards to teach and motivate patients during their visits. Additional reports are provided to the practice that (a) describe practice achievement of goals compared to the other practices in the DMCP and (b) identify practice patients who are at higher risk for developing diabetes complications. These reports serve as practice report cards and guides for focusing practice resources and energy.

The master clinician registry currently contains 3,378 patients and 9,368 visits. Achievement rate for the individual quality indicators varies from 56% for A1C to 49% for LDL. Eighteen percent of patients in the database are achieving goal for all three quality indicators at the same time. This increased success over the national 7% is most likely due to the patient report card and group visits. Patients are pleased to have the report card because it educates, informs and motivates. The group visit adds the power of peers and the patient's health-care providers to the power of the report card. Patient feedback indicates they are very pleased with the report cards and group visits.

Although 18% achievement is better than the national achievement of 7%, it still leaves 82% not at goal. Several barriers (Table 1) exist that make achieving goals difficult. The DMCP addresses the last two barriers listed in the table by creating better systems of care, a different way of educating physicians and their staff, and addressing many of the patient adherence issues. Reimbursement is a more complex issue and will require a political solution.

The current reimbursement system favors care in the later stages of disease and not diabetes care in the early stages of disease. The January third issue of USA Today (6) highlighted the absurdity of reimbursement issue. It pointed out that new hospital construction was focusing on creating facilities for the end stages of disease and its complications because third-party reimbursement paid better for end stage disease care. The article also noted that this construction would increase costs and not increase overall quality of care for these diseases.

The Florida Academy plans to increase the number of offices that use

the DMCP and demonstrate the quality of care that can be provided by family physicians who are diabetes master clinicians.

**Table 1. Barriers to Quality Care for Diabetes** 1. Reimbursement systems that favor care in the later stages of diabetes and not recognition, early treatment and prevention of complications 2. Patient adherence to treatment is limited by level of literacy, understanding of their disease, inability to pay, depression and lack of transportation. 3. Physician frustration secondary to lack of office systems for chronic disease care and prior training that focuses care in the later stages of diabetes

References 1. UK Prospective Diabetes Study (UKPDS) Group: Intensive blood-glucose control with sulphonylureas or insulin compared with conventional treatment and risk of complications in patients with type 2 diabetes (UKPDS 33). *Lancet*:1998; 352:837–853 2. Colhoun H, Betteridge J, Durrington P Hitman G. et al Primary Prevention of Cardiovascular Disease With Atorvastatin in Type 2 Diabetes in the Collaborative Atorvastatin Diabetes Study (CARDS): *Lancet* 2004;364:685-696 3. Heisler M, Piette J, Spencer M, Kieffer E, et al The Relationship Between Knowledge of Recent HbA1c Values and Diabetes Care Understanding and Self- Management, *Diabetes Care* 2005;28:816-822 4. Saydah SH, Fradkin J, Cowie CC. Poor control of risk factors for vascular disease among adults with previously diagnosed diabetes. *JAMA*. 2004;291:335-342. 5. Shahady EJ, Type 2 Diabetes, the metabolic syndrome, inflammation and arteriosclerosis. *Consultant* December 2005 Vol. 45 #14 pp 1579-86 6. Cauchon D, Appleby J. Hospital building booms in 'burbs, *USA Today* Jan 3, 2006 A. 1