Using a Chronic Disease Registry for Diabetes Care

The issue:
For several decades, the American Diabetes Association has published yearly *Standards of Medical Care in Diabetes* with recommendations for monitoring and screening. Disturbingly, only about 45% of adults with diabetes received recommended services such as a quarterly or biannual A1c measurement, annual dilated eye exam, and annual foot exam. Use of a chronic disease registry can improve these process measures significantly.

Using a chronic disease registry to improve care:
Use of a registry promotes proactive rather than reactive medical care. Registry data can be used for population management, individual case management, and for practitioner education. Specified populations of patients who are at high risk and/or are in need of a particular intervention can be identified. For example, all patients who have not had a urine microalbumin checked within the past year can be identified and sent a reminder to have screening done. Individual patients’ registry data can be viewed or printed prior to a visit to ensure that educational needs are met and appropriate tests and referrals are requested at the visit. These data may include dates and results of A1c, lipid, and urine microalbumin testing; dates and results of eye and foot screening; immunization dates; and dates of education such as glucose meter training and medical nutrition therapy. Finally, aggregate data from a practitioner’s panel can be used for benchmarking and/or the practitioner can be provided with a list of assigned patients who are not meeting targets for a particular disease. A practitioner’s aggregate data for A1c testing and control, eye exams, LDL testing and control, influenza and pneumococcal vaccinations, and tobacco assessment can be compared to HEDIS® data for these measures. These data can assist the practitioner and the clinic in targeting resources to improve care. Research shows that use of a registry improves both process measures and clinical outcomes.

Creating a diabetes registry:
A diabetes registry can be as basic as index cards filed in a box or as complex as a computerized database linked to an electronic health record (EHR). The registry is populated either manually or via the EHR and should include:

1. Patient demographic data;
2. Patient diagnosis data; and
3. Recommended processes of care and targets (tests, education, medication, procedures).

Medical practices that do not use an EHR can use pre-built registries for Microsoft Excel or Microsoft Access for their registry (see Resources section). In the absence of an EHR, the registry must be populated manually. This can be done all at once (consider hiring a temporary data entry clerk to accomplish this) or over time as patients come in for clinic visits. The registry must be updated on a regular basis – either on a scheduled basis or daily as new data are available. It is important to determine how the registry will be used and the types of reports required. A registry by itself will not improve care; data from the registry must be used to improve care. This requires that entries are updated either manually or automatically and that data abstraction occurs on a regular basis.

Meaningful use:
To qualify for incentive funding for EHR implementation through the Health Information Technology for Economic and Clinical Health Act (HITECH), practices must show that the EHR is used to achieve significant improvements in health care processes and outcomes. Understanding how to abstract data from a registry and how to use these data to improve processes and outcomes will help meet the criteria for meaningful use.
Resources forClinicians

The following resources are FREE and can be downloaded from the New Mexico Health Care Takes On Diabetes website at www.nmtod.com. For further information, contact Charm Lindblad, Executive Director, at 505-796-9121 or toll-free 1-866-796-9121.

Institute for Healthcare Improvement (IHI): provides information and tools for developing and maintaining a chronic disease registry—A provider tool—www.ihi.org/IHI/Topics/ChronicConditions/AllConditions/Changes/IndividualChanges/EstablishaRegistry.htm

Chronic Disease Electronic Management System (CDEMS) - A provider tool— is a software application developed by the Washington State Diabetes Prevention and Control Program in 2002. It is a Microsoft Access database application designed to assist medical providers and management in tracking the care of patients with chronic health conditions. www.cdeems.com

Family Practice Management—A provider tool— This article by David D. Ortiz, MD, describes the steps necessary to create a chronic disease registry using commercially available software. The article also contains a readymade diabetes registry for Microsoft Excel. www.aafp.org/fpm/2006/0400/p47.html

Meaningful Use— The American Recovery and Reinvestment Act of 2009 specifies three main components of Meaningful Use:

♦ The use of a certified EHR in a meaningful manner, such as e-prescribing.
♦ The use of certified EHR technology for electronic exchange of health information to improve quality of health care.
♦ The use of certified EHR technology to submit clinical quality and other measures.
♦ Simply put, "meaningful use" means providers need to show they’re using certified
♦ EHR technology in ways that can be measured significantly in quality and in quantity. www.cms.gov/ehrincentiveprograms/

These websites may be accessed directly or through the New Mexico Health Care Takes On Diabetes website* www.nmtod.org. *

Please note that these websites do not necessarily represent the views of NMHCTOD. They are listed for your reference and convenience. NMHCTOD does not evaluate the websites for content accuracy or application to any clinical situation.