

Using a Disease Registry to Facilitate Nurse Case Management for High Risk Diabetic Patients

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What is a Disease Registry?

- A disease registry is a collection of a set of health and demographic data for patients with specific problems.
- Using a registry with accurate clinical information, the healthcare team can identify subpopulations with special care needs and generate reminders for preventive screening or interventions.
- Disease registries can be used to conduct research, perform quality measurement, and to provide feedback to providers for quality improvement.

Disease Registry

- The VHA (Veterans Health Administration) provides several data registries to assist clinicians with improving care.
- The registry used for this project was the Proclarity database.



Evidence

- Diabetic patients with elevated LDL typically have smaller, denser LDL particles which increases the formation of plaques and increases the likelihood of cardiac events.
- Death from heart disease is two to four times higher in patients with diabetes compared with those without diabetes. (Nesto 2008.)
- Clinical trials amply demonstrate that LDL cholesterol lowering with drugs will reduce risk for major coronary events.
- Close monitoring of health outcomes is an integral part of nurse case management and has significant potential advantages over physician-based care alone.

The Process

- Data for diabetic patients with LDL>100 collected by the nurse at the start of the month.
- The patients' physician was given this data.
- The nurse and physician reviewed each patient's chart, and the LDL lab test was ordered by the end of the 2nd week monthly.
- The patients were sent letters and a progress sheet requesting that they come into the clinic to have labs drawn.
- If LDL remained elevated, the nurse provided educational materials and instruction on lifestyle changes which contribute to lower cholesterol.
- The nurse kept up with the patients' progress using a spreadsheet, adding new patients as needed.
- At the start of the next month, patients who continued to appear in the database with LDL>100 were contacted by phone.
- This call included education and instructions on what was recommended next by the physician to address LDL.
- This process was continued for 14 months.



Results

- By the end of 14 months (June 2012-April 2012) a total of 53 diabetic patients' data were retrieved from the registry for nurse case management with physician support, to treat LDL>100.
- 33.9% in this group met the goal of LDL<100.
- 60.3% in this group had decreases in LDL from 2-83 mg/dL.
- Data was retrieved for a second group of 64 patients who did not receive the nurse case management intervention during the same 14 month time period.
- 1.5% of patients in the comparison group of patients met goal of LDL<100 mg/dL.
- 25% in the comparison group had decreases in LDL from 2-77 mg/dL.

Implications for Nursing Practice

- Nurse case management using data from a clinical disease registry can facilitate improvement in quality of care and outcomes for diabetics with elevated LDLs.
- This in turn can decrease their cardiovascular risk.



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