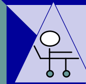


Pittsburgh Regional Healthcare Initiative

Reprinted from *PRHI Executive Summary*, January 2002
Naida Grunden, editor

Highlights from First PRHI Diabetes Report

Prepared for PRHI by the Pennsylvania Health Care Cost Containment Council (PHC4)

Diabetes Mellitus is a widespread, chronic disease caused by the inability of the body to produce or properly use insulin, a hormone needed to covert blood sugar into energy. Type I diabetes (juvenile onset) accounts for only 5-10% of cases. The rest are Type 2 (adult onset).

It is the shocking rise in hospitalizations for Type 2 diabetes—most of which are entirely preventable—documented in PRHI's *Diabetes Report,* released in November 2001. Diabetes places a large burden not only on Pennsylvanians, but on their families, employers, and others who pay for healthcare. Consider:

- Diabetes is the leading cause of new cases of blindness, end stage renal failure, amputation and neuropathy.
- People with diabetes are predisposed to heart disease, hypertension and stroke.
- Diabetes is the 7th leading cause of death in the US. Deaths from diabetes have risen by 58% since 1979.
- Diabetes has particular impact in SW Pennsylvania, with several counties reporting higher death rates than the state average of 24.6 deaths per 100,000. For example, the rate in Beaver County is 27.8; Butler, 26.0; Fayette, 33.9; Washington, 26.0; and Westmoreland, 25.9.

Summary of Findings in Southwest Pennsylvania

Hospitalization for diabetes (Types 1 & 2)

- Year 2000 = 25,000 hospital days and over $63 million in hospital charges.
- Past 5 years = 130,000 hospital days and $1 billion in hospital charges.
- Increased among 30-39 year olds by 33.7%.
- Hospitalization where diabetes was secondary to another disease accounted for over 346,000 hospital days and over $1 billion in charges.

Hospitalization for Type 2 diabetes:

- Increased by 75.4% since 1996.
- Was consistently higher than the statewide rate.
- Increased more than the statewide rate.

Hospitalization for long-term diabetic complications (1996-2000):

- Decreased for Type 1 diabetes by 29.6%.
- ***Increased for Type 2 diabetes by 110.3%.***

Specifically, hospitalizations for lower extremity amputations (LEA) with a diagnosis of diabetes were

Based on data from two sources: the Pennsylvania Health Care Cost Containment Council (PHC4), and the Health Plan Employer Data and Information Set (HEDIS). HEDIS® is a set of standardized performance measures designed to ensure that purchasers and consumers have the information they need to reliably compare the performance of managed health care plans. The performance measures in HEDIS are related to many significant public health issues such as cancer, heart disease, smoking, asthma and diabetes. HEDIS also includes a standardized survey of consumers' experiences that evaluates plan performance in areas such as customer service, access to care and claims processing. HEDIS is sponsored, supported and maintained by the National Committee for Quality Assurance (NCQA).

higher than the statewide rate in all six counties of Southwestern PA.

- Fayette County, 75.4% above average
- Westmoreland County, 36.5% above
- African Americans' LEA rates almost twice that for non-Hispanic Whites.

PA Hospitalization & HEDIS® Measures for Managed Care Plans, 1999:

- Hospitalization and readmission rates where diabetes was the principal diagnosis varied among HMOs.
- HMOs where members had poor hemoglobin A1c (HbA1c) control were more likely to have high rates of hospitalization and low rates of HvA1c testing.
- HMOs with high rates of routine cholesterol screening were more likely to have high rates of other important screenings (such as HbA1c testing and eye exams).

HEDIS® Diabetes Comprehensive Care Measures

Simple methods of testing and surveillance have been shown to reduce the devastating complications of diabetes--which include blindness, amputation of extremities, kidney failure and heart disease. Here are the tests, and how often they are administered to known diabetics in HMOs in Southwestern Pennsylvania in 1999:

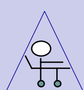
Hemoglobin A1c (HbA1c)		**Lipids (LDL-C)**		**Kidney disease monitored**	**Eye exam performed**
% tested	*% poorly controlled*	*% screened*	*% controlled*	*% patients*	*% patients*
70.1 – 86.9	28.7 – 41.5	66.4 – 78.8	26.5 – 49.0	38.5 – 46.7	22.6 – 61.1

Next Steps for PRHI Diabetes Working Group

The Diabetes Working Group is developing an improvement model that includes:

- Improving connections between patients, employers, insurers, primary care physicians, specialists, and educators.
- Testing unique educational and reimbursement approaches.
- Creating point-of-care checklists, reminding physicians caring for known or suspected diabetic patients to perform an A1C test, foot and eye exams, and cholesterol and blood pressure checks.
- Encouraging employer-based information and referrals.
- Mapping patient outcomes and linking them to care processes.

This model is being constructed by the Working Group who will be seeking grant funding to test it, refine it, and make it sustainable.



Centre City Tower
650 Smithfield Street, Suite 2150
Pittsburgh, PA 15222

Phone: 412-535-0292
Fax: 412-535-0295
Website: **www.prhi.org**