



Bulletin No. 5

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Therapeutic Footwear for Diabetes - Under Used and Under Covered

INTRODUCTION:

People with diabetes are at increased risk for lower-extremity amputations due to peripheral neuropathy and peripheral vascular disease. Therapeutic footwear (custom-molded shoes, depth-inlay shoes with inserts, or custom-molded insoles) can prevent or relieve some diabetic foot problems but can be expensive and is often not covered by insurance. Foot ulcerations and amputation rates are decreased among patients receiving intensive foot care including the use of therapeutic shoes.

Diabetes increases the risk of lower extremity amputation. Peripheral neuropathy, callus formation, ulcers, and foot deformities all increase the risk. Dry, cracked skin caused by an absence of sweating may lead to infection. By redistributing or relieving pressure, therapeutic footwear can benefit some diabetic foot problems. Therapeutic shoes can be fitted by podiatrists, certified pedorthists, certified orthotists, and certified prosthetists. Inserts cost between \$40 - \$90. A pair of ready-made, catalog-ordered therapeutic shoes costs approximately \$150, while a custom-made pair can cost between \$400 - \$500.

In September 1991, the Alaska Diabetes Control Program, in cooperation with the American Diabetes Association- Alaska Affiliate (ADA), conducted a survey among people with diabetes to determine the status of health insurance coverage for therapeutic footwear and to assess whether people with diabetes were having difficulty obtaining therapeutic footwear due to cost or lack of insurance coverage.

METHODS:

A one-page survey was included in the September 1991 ADA newsletter which was mailed to approximately 4000 persons, of which approximately 3000 are people with diabetes.

RESULTS:

Ninety-five usable surveys were returned. Sex and age were known for 94 of the 95 respondents, 45 (48%) were male. Most people were adults greater than 18 years of age (90, 96%), and the majority were over 55 years of age (67, 71%).

Health Insurance Coverage:

Most respondents had health insurance (79, 83%). Seventy-two people (76%) reported private health insurance from 22 companies. Thirty-four people (36%) had Medicare coverage; eleven people (12%) had Medicaid coverage. Sixteen respondents (17%) with no health insurance coverage were younger (mean age = 44) than those with insurance coverage (mean age = 58) ($p < .002$).

Only eight people (8%) reported that their health insurance company covered therapeutic footwear. Of six health insurance companies we contacted, none routinely covered therapeutic footwear; all had special requirements, including review by a medical review board. Medicare covers footwear only if attached to a brace, excluding most of the therapeutic footwear recommended to people with diabetes. Therapeutic footwear is covered under Alaska Medicaid if ordered by a physician and purchased through an orthotic provider enrolled in the state Medicaid program.

Recommendation for Footwear:

Twenty-three people (24%) including three people without insurance had received a medical recommendation for therapeutic footwear. Sixteen people (70%) actually obtained the footwear; insurance paid for only three of these (19%). Of the seven who did not obtain footwear after it was recommended, four (57%) stated it was because of the cost involved. All seven had health insurance. Of the 23 people recommended to obtain therapeutic footwear, only three (13%) received insurance reimbursement after purchasing the footwear.

DISCUSSION:

Due to a low response rate and probable selection bias, these results cannot be generalized. However, several observations can be made.

Sixteen people with diabetes reported no health insurance coverage. This group of noninsured people with diabetes is at risk of developing diabetic complications which may go unnoticed until too late to prevent them.

Most respondents did not know whether their insurance company would reimburse them or not. Even in this limited survey we identified seven individuals who needed footwear, but had not purchased it, four due to cost. For those who purchased footwear, two-thirds of the time they paid for it themselves. Private health insurance coverage for therapeutic footwear for diabetes is sporadic and not routine.

RECOMMENDATIONS:

- Physicians should perform frequent foot exams on all of their patients with diabetes.
- Individuals with diabetes should ask if their health insurance company covers therapeutic footwear. If possible, decisions about purchasing health insurance should include information about therapeutic footwear coverage.
- Health insurance companies should review their policies regarding therapeutic footwear and consider routine coverage for therapeutic footwear for people with diabetes with documented foot problems.
- Therapeutic footwear for people with diabetes with foot problems should be covered by Medicare, the health insurance program for people age 65 years and older, where lower limb amputations are most prevalent.

REFERENCES

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