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Inappropriate medication use among older adults with diabetes.

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use. About 32% of the new users were identified with a potential indication in a 7-day time window prior to the prescription fill date. The mean period between the claim identified with a pain indication and propoxyphene fill date was 1.9 days(SD=2.4). The most common conditions identified as indications for propoxyphene use were cancer(15.9%), back disorder(9.9%), fractures(7.7%), osteoarthritis(7.5%), and joint pain(7.1%). Extending the time window by regular intervals from 7-days up to 180-days increased the number of new users identified with a pain condition to 65.8%, but the distribution of indications and the most common conditions remained the same. The use of this drug for medical conditions when safer and more efficacious alternatives are readily available raises serious concerns for clinicians treating pain in the elderly.

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BENEFICIAL EFFECTS OF A NATIONAL COLLABORATIVE ON OUTCOMES IN GERIATRIC DIABETIC PATIENTS: RESULTS FROM A COMMUNITY HEALTH CENTER.

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Supported by: Bureau of Primary Health Care

Background: The Health Disparities Collaborative, a project of the Bureau of Primary Health Care, coordinated a national effort to improve health care in certain chronic diseases, one of which is diabetes. Centers that participate in this ongoing collaborative work on and study ways to improve care in diabetes in local communities.

Methods: Between April and July 2001 we began to study 24 patients aged 65 and older (range 65 to 91 years, mean 73.5) with type 2 diabetes at our community health center in central Connecticut. We instituted a program that involved a certified diabetes educator meeting regularly with our patients to teach them about diabetes and establish self-management goals. We also used nationally distributed software to update the patient medical records on accepted measures of diabetes care. Among the measures we studied were: 1) Hemoglobin A1C levels, 2) whether the patients were on an ACE inhibitor, 3) whether the patients had a retinal exam in the preceding 12 months, 4) whether the patients had a foot exam in the preceding 12 months, 5) whether the patients had received a pneumovax, 6) cholesterol, and 7) LDL levels.

Findings: Through October, 2002 (mean follow-up of 17 months), 1) mean hemoglobin A1C decreased from 8.18 to 6.96 (mean decrease of 1.22), 2) percent of patients on an ACE inhibitor stayed constant at 63%, 3) percentage of patients who had a retinal exam in the past year increased from 21% to 67%, 4) percentage of patients who had a foot exam in the preceding 12 months increased from 29% to 67%, 5) rates of pneumovax increased from 79% to 92%, 6) mean cholesterol levels decreased from 187 to 178, and 7) mean LDL levels decreased from 112 to 100.

Conclusions: A locally adopted, national collaborative to improve diabetic care led to significant improvements in the care of geriatric patients with diabetes. Patients had marked reductions in levels of hemoglobin A1C. Rates of ACE inhibitor use did not change. The patients had improved rates of annual retinal and foot exams, pneumococcal vaccination, and reductions in cholesterol and LDL levels.

P512 ***AFAR Grantee***

INAPPROPRIATE MEDICATION USE AMONG OLDER ADULTS WITH DIABETES.

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Supported by: John A. Hartford/AFAR Medical Student Geriatric Scholars Program, Robert Wood Johnson Minority Medical Faculty Development Program

PURPOSE: To determine if having diabetes increases the risk of inappropriate medication use (IMU) among older adults.

METHODS: We conducted an analysis of pooled data from two concurrent observational cohort studies with similar sampling frames that evaluated quality of care for community-dwelling Medicare beneficiaries over the age of 65 years. IMU was defined using consensus-based lists of inappropriate prescribing practices. We constructed multivariate models of the relationship between diabetes and IMU after adjustment for patient socio-demographic characteristics, health status, a chronic illness score, and the number of medications.

RESULTS: The analysis included 409 persons with diabetes and 387 without diabetes, for a 60% response rate. One or more inappropriate medication was reported by 13% of the participants. Persons with diabetes were less likely to be white, and more likely to be female, Latino, low income, and less educated. Clinically, persons with diabetes had lower physical well-being but higher emotional well-being, more chronic conditions, and were on more medications (5.7±3.1) than participants without diabetes (3.0±2.6), p<0.001. In the adjusted analyses, characteristics associated with more IMU were annual income <$20,000 (OR=1.86, p=0.02), a higher chronic illness score (OR=1.45, p<0.001), and the number of medications (OR=1.24, p<0.001). However, diabetes was associated with lower odds of IMU (OR=0.55, p=0.05). Further analyses revealed an interaction between the number of medications and diabetes (see table). In models that included the interaction term, lower income and higher chronic illness score remained associated with higher rates of IMU.

CONCLUSIONS: For persons on more medications, having diabetes may be associated with lower rates of IMU since providers may more closely scrutinize their medications. Low income patients may be particularly vulnerable to inappropriate medication prescribing.

Supported by the John A. Hartford/AFAR Medical School Geriatric Scholars Program, the Robert Wood Johnson Minority Medical Faculty Development Program

Adjusted odds of IMU - interaction between diabetes and number of medications

	No Diabetes	Diabetes
<3 Medications	1 (Reference)	5.4 (p=0.14)
3+ Medications	17 (p=0.007)	9.6 (p=0.03)

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DO HOME AND COMMUNITY-BASED SERVICES REDUCE NURSING HOME PLACEMENT?

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Supported by: Kansas Department of Social and Rehabilitative Services

Background: Kansas Medicaid covers home and community-based services (frail elderly (FE) program) as an alternative for older adults who are eligible for nursing home (NH) care but wish to stay in the community. Objective: To determine whether FE services lowered the rate of subsequent NH admission. Methods: Retrospectively, we identified a randomly selected cohort of community-dwelling, elderly Medicaid enrollees. Those enrolled in the FE program (n=963) were compared to those who did not receive any FE or NH services during the base year (n=2992). The outcome was any NH use during the subsequent year and modeled using logistic regression accounting for differences in demographic factors and comorbidities. Results: Persons receiving FE services were more likely to be white (82% vs 78%), female (78% vs 70%), and older (78 yrs vs 75 yrs). The 3 most prevalent comorbidities for both groups were hypertension,