ences in costs between HbA1c groups were analyzed using a gen-
eralized linear model (GLM), controlling for demographics, pa-
ent severity, as well as comorbidities and complications.

RESULTS: In total, 79% of individuals in the analysis obtained
good HbA1c (HbA1c of less than or equal to seven) control at some
time during the post-period although only 59% of these
dividuals maintained this level of glycemic control for the dur-
ation of follow-up. Individuals in the fair (HbA1c greater than
seven to less than or equal to nine) or poor (HbA1c greater
than nine) groups had significantly higher diabetes related
total medical costs compared to individuals with good glycemic
control ($1641 v. $1372 per member per year [PMPY]; p < 0.05;
$1705 v. $1372 PMPY; p < 0.05, respectively). CONCLU-
SIONS: Although initially successful at obtaining good glycemic
control, a large percentage of individuals were unable to main-
tain such control. This is coupled with a finding of higher dia-
betes-related medical costs for individuals at sub-optimal levels
of control. These results suggest that novel therapies which
improve the capability of individuals to achieve and maintain
glycemic control may have positive financial as well as health
implications.

PDB17
BURDEN OF ILLNESS ASSOCIATED WITH SYMPTOMS
OF DIABETIC PERIPHERAL NEUROPATHY AND
DIABETIC RETINOPATHY
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OBJECTIVES: To evaluate the effect of symptoms of diabetic
peripheral neuropathy (SDPN), diabetic retinopathy (DR) and
co-morbid SDPN & DR (COMORB) among US adults ≥40 years
old with diagnosed diabetes on several burden of illness (BOI)
measures, including indirect costs and health care utilization,
Health and Nutrition Examination Surveys (NHANES).
METHODS: Included in the analysis were 830 NHANES
respondents ≥40 years old classified as having diagnosed
diabetes. Logistic regression models were used to assess the effect
of SDPN, DR and COMORB on BOI. Model covariates included age, gender,
race, education, insurance status, current smoking status, cur-
rently asthmatic, and history of cardiovascular disease, cancer,
arthritis, COPD, hypertension and stroke. The conditions of
interest were assessed based upon respondent self-report.
NHANES, it was estimated that, among US adults ≥40 years old
with diagnosed diabetes, those with SDPN (OR = 2.27; 95% CI
= 1.34, 3.85), DR (1.67; 1.08, 2.59) and COMORB (2.88; 1.28,
6.48) were each more likely to have four or more health care
visits in the past year than those without the corresponding
condition. Those with DR (1.81; 1.31, 2.50) and COMORB
(2.07; 1.13, 3.77) were both more likely to have had at least
one overnight hospital stay in the past year. Finally, those of
working age (40–65) with SDPN (3.39, 1.66, 6.89), DR (3.08;
1.55, 6.11) and COMORB (4.51; 2.27, 8.96) were each more
likely to be unable to work due to physical limitations.
CONCLU-
SION: Among US adults ≥40 years old with diagnosed dia-
betes, SDPN, DR, and COMORB all appear to significantly
increased BOI. Future therapies that offer relief of both of these
conditions may have significant benefits on indirect costs (such
as lost work time) and direct measures of health care resource
utilization.

PDB18
ECONOMIC EVALUATION OF DRUG THERAPY AMONG
DIABETES MELLITUS PATIENTS IN OLABISI ONABANJO
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STATE, NIGERIA
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OBJECTIVE: To carry out economic evaluation of drug therapy
among diabetic patients. METHODS: The methodology was
Cost of Illness Analysis. Out-Patients were considered. Drug
review was carried out retrospectively for randomly sampled 37
case notes over one-year period. Demographic data were col-
lected and number of hospital visits, fasting blood sugar and
blood pressure at each visit, drugs prescribed at each visit. Cost
components were the direct costs. These include the total cost
of drugs over one-year period, personnel cost, diagnostic costs,
and transport cost. Hospital cost of the drugs were used, cost per
defined daily dose of each drugs was calculated as well as the
total drug cost, taken the duration of therapy into consideration.
Stop-watch-time studies and monthly earnings were used in the
calculation of personnel cost. Since the study covers one year
period (July, 2003–August, 2004) neither discounting nor infla-
tion were considered in the analysis. RESULTS: Most of the
patients were Type-II Diabetes Mellitus (n = 33; 89.2%) while
Type-I (insulin required) were four (10.8%). In total, 83.8%
were hypertensive. Total costs of drugs = N1,219,932.70 (US
$8,713.81), Anti-diabetic drugs = N689,231.50 (US $4,923.82)
(56.5%), Anti-hypertensive drugs = N530,701.20 (US $3,790)
(44.5%), Transport = N30,696.70, Diagnostic = N56,400,
Person-
nel = N53,340.40. Total Cost of Illness for one year for 37
patients = N1,360,369.80 (US $9,716.93). Total cost of treating
1000 patients = N1,360,369800.00 (US $9,716,930.00) aside
indirect cost among others per year. Average cost per patient =
N36,766.75 (US $262.62) (84.7% of N43,400.00 (US $310.0)
per capital income in Nigeria). Range; N2,618.44 (US $18.70)
and N268,872.81 (US $1918.38). N = Naira. CONCLU-
SION: Spending an average of 84.7% of per capital income to treat
an illness annually is highly unfortunate as this further worsens
the quality of life of such patients. This call for good understanding
of the disease condition by the society to minimize the incidence
while ensuring compliance and also for improved policy by
government.

PDB19
COLLECTION OF COST DATA FOR DIABETES
COMPLICATIONS IN CANADA AND AUSTRALIA
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OBJECTIVES: The aim of this study was to collect cost data on the
complications associated with diabetes mellitus in Canada
and Australia for use in a published, validated computer simu-
lation model of the disease. METHODS: A search for costs data
was performed in PubMed to identify peer-reviewed cost data in
Canada and Australia published in the last ten years. Costs not
identified in the literature were gathered from published gov-
ernment reports (sources included reports from the Provincial
Ministry of Health in Ontario and Newfoundland). All costs
were inflated to 2004 values. Major complication costs are pre-
sented. RESULTS: The costs of diabetes complications are well
documented in Canada, but there is a paucity of published cost
data for Australia. No Australian cost data were identified, and
a specialist research program has been initiated to generate this
information. In Canada, the event costs for non-fatal myocardial