Resource utilization included surgical procedures, implants, spectacles, visits to ophthalmologists and eye-centers, transportation, and time lost by patients. Discount rates and sensitivity analyses were performed. Two perspectives were considered: Sickness Fund (SF) and Societal. RESULTS: Spectacle-free rates were >80% for ReSTOR® and 40% for MFIOLs. Mean lifetime numbers of spectacles purchased were 4.2 with ReSTOR®, 12.7 with MFIOLs, and 21.3 without PS. Early PS avoided 0.80 late cataract surgeries per subjects. Surgical procedure costs were €3292 for ReSTOR® and €2292 for other MFIOLs, respectively. From the societal perspective, total undiscounted costs for ReSTOR® were €5268, €7170 for other MFIOLs, and €8492 without PS. With a 3% discount rate, these costs were €4369, €5071 and €4244, respectively. From the SF perspective, total undiscounted costs were €146 with ReSTOR®, €437 with MFIOLs, and €1688 without PS. With a 3% discount rate, these costs were €76, €227 and €747, respectively. CONCLUSION: PS should decrease the undiscounted costs of vision care from both perspectives. For SF it is highly beneficial while PS remains unlisted for reimbursement. For Society, the discounted incremental cost of avoiding spectacles at age 45 was less than €9/year. ReSTOR® improves patients’ lifestyle and is a cost-effective alternative versus spectacles in presbyopic patients.

PEY12

MODELING THE COSTS AND CONSEQUENCES OF RESTOR®, A MULTIFOCAL INTRAOCULAR LENS (IOL), AFTER CATARACT SURGERY IN FRANCE

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OBJECTIVE: To compare the lifetime costs and consequences of liberating patients from spectacles, after cataract surgery, by implanting the multifocal IOL “ReSTOR®” versus monofocal IOLs. METHODS: A Markov model was created to follow patient cohorts from cataract surgery until death. Prevalence rates of patients not needing spectacles after cataract surgery were obtained from a clinical trial. Resource utilization included implant surgery, IOLs, spectacles, visits to ophthalmologists and eye centers, transportation, and time lost by patients. Economic perspectives were those of Society and Sick Funds (SF). Mortality rates were introduced into the model. Discount rates were applied. Sensitivity analyses were performed. Patients were followed from age 70 to 100 years. RESULTS: More than 80% of patients implanted with ReSTOR® were spectacle-free compared to about 10% with monofocal IOLs. The mean number of spectacles purchased was 1.7 after ReSTOR® and 7.6 after monofocal IOLs. Surgical costs were €3292 for ReSTOR® and €2292 for monofocal IOLs. From the societal perspective, total undiscounted cost estimates were €4384 with ReSTOR® compared to €5359 with monofocal IOLs. With a 3% discount rate these costs became €4226 and €4654, respectively. From the SF perspective, total undiscounted cost estimates were €2350 with ReSTOR® and €2553 with monofocal IOLs. With a 3% discount these costs became €2334 and €2481, respectively. Costs and intervals between spectacle replacements were the most sensitive parameters. CONCLUSION: From both the societal and SF perspectives, undiscounted savings achieved by liberating patients from spectacles counterbalanced the initially higher cost of ReSTOR®. For Society, the discounted incremental cost of avoiding spectacles after ReSTOR® implants was less than €13/year, and SF saved money. ReSTOR® improves patients’ lifestyle and is a cost-effective alternative versus spectacles in patients requiring cataract surgery.

PEY13

LAST STAGE GLAUCOMA IN EUROPE: COSTS AND QUALITY OF LIFE OF PATIENTS FROM 4 COUNTRIES

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BACKGROUND: European studies have identified primary open angle glaucoma (POAG) as the second leading cause of blindness, accounting for 8–10% of blindness in older people. The objective of this study was to estimate the societal costs and the quality of life among patients with late stage POAG. METHODS: Charts of late stage POAG patients in France, Germany, the UK and Denmark were reviewed and the patients were interviewed. Costs and utility values of health related quality of life were estimated (based on resource use multiplied with unit costs and on EQ-5D questionnaire). RESULTS: 162 patients were included. Average level of visual acuity was 0.28 and 0.11 of the best and worst eye, respectively. Annual health maintenance costs of late stage glaucoma patients are €830 (SD: €445). This does not include costs of surgery and larger procedures. Purchase costs of devices amount to €2045 per patient. Most importantly, however, are costs of home care, which average €2703 per year. With respect to the health related quality of life the average score is 0.67 and best predictor of QoL is visual acuity of the patients’ best eye (negatively correlated, r = 0.005). Best eye visual acuity is also negatively correlated with health care maintenance costs (p = 0.024). With respect to home care costs the correlation is positive but not significant. CONCLUSIONS: This study shows that late stage glaucoma is associated with considerable health care and—in particular—social care costs (home care). It is an important finding that maintenance health care costs is negatively correlated with visual acuity (and thereby QoL). A lower visual acuity is predictive of lower QoL.

PEY14

BIMATOPROST, LATANOPROST, AND TRAVOPROST FOR THE TREATMENT OF GLAUCOMA: A COST-EFFECTIVENESS ANALYSIS IN SCANDINAVIA USING A DECISION-ANALYTIC HEALTH ECONOMIC MODEL

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OBJECTIVE: To assess the cost-effectiveness of bimatoprost, latanoprost, and travoprost monotherapy in patients with open-angle glaucoma in Denmark, Norway, and Sweden (Scandinavia). METHODS: Cost-effectiveness analysis was performed using a Markov decision-analytic health economic model with stable and progressed glaucoma as the health states. Transition probabilities for primary open-angle and exfoliation glaucoma were derived from published medical literature, and information regarding clinical practice patterns was obtained from surveys completed by 45 ophthalmologists dispersed throughout each of the countries. Country-specific unit costs were used for medications, clinic visits, diagnostics, and outpatient services. Quality of life weights for various levels of visual acuity ranged from 0.30 to 0.68, and the effectiveness metric was the quality-adjusted life year (QALY). A 5-year time horizon was adopted, analyses were from a payer perspective, and costs were discounted at 3% per year. RESULTS: Effectiveness (years till progression) was within a narrow range (3.2048 to 3.2613 QALYs) across all products.