67.6% were male. Based upon the questionnaire, 36.1% of patients reported nonadherence. Lower adherence rate (49.1%) was obtained when comparing medications prescribed at discharge to medications documented at follow-up. Based on the questionnaire, the more medication prescribed, the greater the adherence ($p = 0.02$). Trend tests of adherence over increasing number of medications were positive in all medication classes (beta-blockers, ACE inhibitors, anticoagulants, and lipid lowering drugs). Multivariate models show the similar trend when adjusted for age and gender. Adherence also increased with more documented comorbidities ($p = 0.01$). When comparing medications prescribed to medications at follow-up there were no significant predictors of adherence.

CONCLUSIONS: Nonadherence is frequent in patients after an MI (36%). Utilizing a medication adherence questionnaire to assess adherence is better than merely comparing medication lists at two different points in time. Better adherence to all four evidence-based therapies after an MI is seen in patients prescribed more medications and with more disease states. Higher adherence may be related to a recent major health event, more recent education on treatment benefits, and/or to a focus on rehabilitation. This study demonstrates the need for a larger, broader study that includes health beliefs, psychosocial assessment, and other patient factors that may influence compliance.

ARTHRITIS & OSTEOPOROSIS—*Clinical Outcomes Presentation*

PA01

CARDIORENAL EFFECTS AND COSTS OF COX-2 INHIBITORS IN A MANAGED CARE ORGANIZATION

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Arthritis—rheumatoid and osteoarthritis—is one of the most prevalent chronic conditions affecting nearly 50% of persons over the age of 65.

OBJECTIVES: The objective of this study was to compare cardiorenal events and costs between two COX-2 inhibitors—celecoxib and rofecoxib.

METHODS: This was a retrospective analysis of medical and pharmacy claims. All patients newly started on a COX-2 inhibitor during 7/1/99 to 6/30/00 were identified and followed for 6 months before and after the initial COX-2 prescription. Incident cardiorenal events were attributable to a COX-2 if there was an ICD-9 diagnosis code within 45 days after the last days supply of the prescription.

RESULTS: A total of 20,514 patients were newly prescribed celecoxib ($n = 12,487$) or rofecoxib ($n = 8,027$). Mean age was 65 (+/–15) and 68% were female. Primary indication for COX-2 was pain (55%), followed by osteoarthritis (23%), other arthritis (17%), and rheumatoid arthritis (6%). There were no significant differences in baseline cardiorenal history and medication use (antiarthritic, antihypertensive, and GI-related) between the two cohorts. Among the baseline hypertensive patients, those on rofecoxib were 34% more likely to experience an incident cardiorenal event than patients on celecoxib, adjusting for age, gender, comorbidity, indication and dosage (OR = 1.34; $p = 0.007$). Results were similar for the baseline non-hypertensive patients, with those on rofecoxib reporting a higher risk of new cardiorenal events (OR = 1.18; $p = 0.0009$). Although not statistically significant, patients on rofecoxib incurred slightly higher total health care costs than those on celecoxib ($8,188 vs. $7,540; $p = 0.0867$).

CONCLUSION: The risk of cardiorenal events was significantly higher in rofecoxib-treated patients than celecoxib-treated patients. There were no statistically significant differences in total costs between the two COX-2 inhibitors, although celecoxib-treated patients incurred slightly lower total health care costs.

PA02

TREATMENT PATTERNS OF CARE AND THE RISK OF SUBSEQUENT FRACTURES AMONG OSTEOPOROTIC WOMEN WITH INCIDENT FRACTURES

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Osteoporosis affects 4–6 million women in the USA.

OBJECTIVES: The objective of this study was two-fold: 1) to evaluate treatment patterns of care associated with an incident fracture in postmenopausal women in a managed care organization and 2) to estimate the incidence of subsequent fractures by age.

METHODS: This was a retrospective analysis of medical and pharmacy claims. Women aged 55 or older, with a primary or secondary diagnosis of a new bone fracture during calendar year 1999, and continuously enrolled in the health plan were included in the sample. All claims 12-months before and 15-months after index fracture date were evaluated for medication use and subsequent fractures.

RESULTS: A total of 19,720 women had incident bone fractures. Mean age was 78 years (+/–9.4). Of these 19,720 women, 90% had nonvertebral fractures, mainly hip and wrist, and 10% had vertebral fractures. Overall use of osteoporosis therapy, anytime before and after index fracture, was 24% and 29%, respectively. Of the women receiving therapy after fracture, 65% were prescribed estrogen, 28% bisphosphonates, 17% nasal calcitonin, 14% combination therapy, primarily a bisphosphonate plus estrogen, and 5% raloxifene. Only 25% of treated women remained on therapy for at least