mean fall-related hospital reimbursement of $14,769. LTCF costs were estimated from RUG classifications and associated payment rates. Total reimbursement per resident per year (PRPY) was calculated as the sum of annualized LTCF and hospital reimbursement. Fall-related costs were estimated as the difference in changes in reimbursement between groups from pre- to post-periods. **RESULTS:** The matched sample included 1130 fallers and 1130 non-fallers. Fallers had substantially more fractures and hospitalizations in the post-period than non-fallers. The sum of LTCF and hospital costs increased $4722 PRPY for fallers from pre- to post-periods; non-fallers' costs decreased by $1,537 PRPY. The difference in changes—$6,259 (95% CI = $2,034 to $10,484) PRPY—represents fall-related costs. About 60% of the difference was attributable to higher hospitalization costs for fallers. In, addition fallers were more likely to be discharged to hospitals or to die. **CONCLUSION:** Falls in LTCFs result in substantial costs, primarily due to higher rates of fractures and hospitalizations.

## OSTEOPOROSIS—Health Care Use & Policy Studies

**POS12**

### USE OF OSTEOPOROSIS MEDICATIONS FOLLOWING A FRACTURE

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**OBJECTIVES:** To estimate the proportion of patients who receive pharmacologic treatment for osteoporosis following an osteoporotic fracture and to identify factors that determine which patients receive treatment. **METHODS:** Data were taken from the Medical Expenditures Panel Survey (MEPS) for 2001–2003. Women who reported a wrist, vertebral, or hip fracture after the age of 50 years were identified. Prescription data were assessed for these subjects and two groups were identified: those who received pharmacologic treatment following a fracture and those who did not. Using Andersen's Behavioral Model of Health Services Utilization, two categories of variables were examined to determine factors related to treatment: characteristics of the health delivery system and characteristics of the population at risk. **RESULTS:** The final sample consisted of 129 subjects. This represented an estimated 1,238,086 women with a history of osteoporotic fracture during 2001 to 2003 in the civilian, female, non-institutionalized U.S. population. Of these, 38% received treatment. Those treated were most likely to receive either hormone therapy or bisphosphonates. The only variable that was significantly different ($p < 0.05$) between those treated and not treated was type of insurance coverage; patients covered by a private HMO were more likely to receive pharmacologic treatment. **CONCLUSION:** Most women do not receive pharmacologic treatment for osteoporosis following a fracture. Substantial efforts should be made to close the gap between guideline recommendations and clinical practice. We were unable to identify variables other than insurance coverage that were related to treatment.

## OSTEOPOROSIS—Methods and Concepts

**POS13**

### IMPACT OF THE ALLOWABLE GAP ON PERSISTENCE IN THE BISPHOSPHONATE MARKET

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**OBJECTIVES:** Determination of medication persistence, using administrative pharmacy data, relies on the pharmacist-reported days supply and an allowable gap between prescriptions. This concept is used consistently in secondary research, but there are no standards on the appropriate gap to allow between the run-out of the days supply of one prescription and the dispensed date of the patient's subsequent prescription. The purpose of this research is to evaluate the impact of varying the allowable gap when assessing persistence in a market with variable dosing frequencies. **METHODS:** The osteoporosis market includes competing bisphosphonate products with different dosing regimens—weekly or monthly doses. We assessed the impact of expanding the allowable gap on persistence and evaluated the impact of allowing different gaps for each product because differences in dosing frequencies may impact patients' refill patterns. Finally, we examined the refill patterns of patients on each product and the potential impact of those patterns on the determination of persistence. Cox proportional hazards models, adjusted for patient characteristics, were used to compare persistence between products. We used the IMS Longitudinal Prescription (LRx) database, consisting of anonymized patient retail prescription records in the U.S. The study cohort included 165,955 women aged 50 years or older who initiated therapy between September and November 2005. **RESULTS:** As the allowable gap increased, the average persistence of newly treated bisphosphonate patients also increased (112 days using 30-day gap, 125 days using 45-day gap), but relative differences between products were similar, with monthly patients less persistent than weekly (HR = 1.09 95%CI = (1.08,1.10) using 30-day gap; HR = 1.05 95%CI = (1.03,1.06) using 45-day gap). When the gap was allowed to differ across products (45-day gap for monthly vs. 30-day gap for weekly), a different relationship between products was found (HR = 0.97 95%CI = (0.96,0.98)) **CONCLUSION:** It is important to consider the allowable gap, in relation to dosing frequencies, when interpreting results from persistence measures.

## OSTEOPOROSIS—Patient Reported Outcomes

**POS14**

### COMPARISON OF SF-6D AND EQ-5D UTILITIES IN OSTEOPOROTIC HIP FRACTURE PATIENTS

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**OBJECTIVES:** To compare SF-6D and EQ-5D in both, absolute values and sensitivity to change over time, in osteoporotic hip fracture patients in Poland. **METHODS:** Data were extracted from prospective study on outcomes of osteoporotic hip fractures in Poland (PolHipQol study). Eligible patients had to be 60 years or more, have low energy femoral neck fracture or pertrochanteric fracture of the femur, absence of severe cognitive dysfunction (measured by Hodkinson's Abbreviated Mental Test Score) and both SF-36 and EQ-5D post fracture measurements avaiable. SF-36 scores were translated into SF-6D utilities using the algorithm developed by Brazier et al. The EQ-5D utilities were based on the European VAS value set. The correlations between preference measures were assessed using Spearman's rank correlation coefficient. Sensitivity to change over one year was evaluated with the standardized response mean (SRM). **RESULTS:** Post fracture data of 65 patients (mean age 77.8; 54 women) and one year follow-up data of 51 patients were avaiable (9 patients were ceased and 5 lost to follow-up). Mean SF-6D utility decreased from 0.65 (SD 0.13) before fracture (recall method) to 0.49 (0.10) after fracture, and then increased to 0.55 (0.12) at the final follow-up. Mean EQ-5D utility decreased from 0.73 (0.22) before fracture to 0.24 (0.17) after fracture, and then increased to 0.47 (0.23) at the final follow-up. SF-6D and EQ-5D utilities