benefit from anticipatory care management. **Methods:** We developed a historical cohort of 27,470 Medicare Advantage beneficiaries in an integrated HMO during 2006 and 2007. We used descriptive analyses to characterize three sub-populations (those who reach the DBT in 2006 only, in 2006 and 2007, or neither year) in terms of demographics, morbidity, generic and brand name medication use, utilization, diagnoses, procedures, use of catastrophic benefits, and smoking status. **Results:** 859 members reached the DBT in both 2006 and 2007 (repeaters), 904 in 2006 only, and 25,707 in neither year. Relative to those who reached the DBT in neither year, repeaters had significantly higher morbidity; as reflected by significant differences between groups in all descriptive categories. However, only a subset of these characteristics significantly differentiated between repeaters and those who reached the DBT in 2006 only: repeaters had higher rates of outpatient utilization (primary care, specialty care, and emergency department); were more likely to have a history of tobacco use, diagnoses of COPD, history of stroke, long-term anticoagulation, and dementia; and had greater use of specific trade name medications, particularly those used to treat respiratory symptoms. Repeaters and those who reached the DBT in 2006 only did not differ in socioeconomic status, use of specific generic medications (except prednisone), reaching catastrophic coverage, or multiple chronic diagnoses and procedures. **Conclusions:** In this initial exploration, Medicare Advantage beneficiaries who repeatedly reached the DBT differ from those who only reached it in one year in utilization, selected diagnoses, and use of certain trade-name medications. Several of these brand medications are for pulmonary conditions in individuals with a history of smoking—a finding that deserves additional investigation.

PS2-21:
The Return on Investment of a Laboratory Program to Decrease Adverse Events of ACE Inhibitors and ARBs

David H Smith, PhD, *Kaiser Permanente Northwest*; Marsha A Raebel, PharmD, *Kaiser Permanente Colorado*; K Arnold Chan, MD, ScD, *Harvard School of Public Health*; Eric S Johnson, PhD, *Kaiser Permanente Colorado*; Amanda Petrik, MS, *Kaiser Permanente Northwest*; Jessica Weinstein, MD, *Oregon Health and Science University*; Xiuhai Yang, MS, *Kaiser Permanente Northwest*; Adrianne Feldstein, MD, MS, *Kaiser Permanente Northwest*

Introduction: The efficiency of patient safety interventions is not well studied, including laboratory monitoring for drug therapy. Although 30% of patients receiving inhibitors of rennin-angiotensin system (RAS i.e. ACEI and ARB medications) are not monitored according to guidelines, knowledge of the efficiency of decreasing adverse drug events through monitoring programs above usual care is lacking. **Methods:** We focused on laboratory monitoring of new users of RAS inhibitors to help prevent adverse events of hyperkalemia and acute renal failure. We used a probabilistic decision model to synthesize multiple data sources to inform how increasing monitoring above usual practice changes cost and outcomes from the payer perspective. We accounted for differential timing of costs and benefits and discounted at a 5% rate. Costs included the monitoring program, offsets from reduced care (e.g., hospitalization) and litigation costs. Data from a large integrated health plan were used to estimate the community-based probability of adverse events. The potential to reduce adverse events was estimated from chart review. We examined cost-effectiveness at $30K and $100K per QALY in the overall population, patients with diabetes, and patients with chronic kidney disease (CKD). **Results:** Adverse events were most common in those with CKD; their cumulative incidence rate was 0.041 (95% CI, 0.047 to 0.037) compared to 0.016 (0.017 to 0.014) and 0.010 (0.011 to 0.010) in the diabetes and overall populations, respectively. Intervening on all new users or the subset with diabetes was cost saving <1% of the time. A monitoring program restricted to patients with CKD was cost saving with a probability of 95% in the base case. In CKD patients, if the program was only half as effective, the probability of cost savings was 65%; if the program had a lower uptake rate (49% instead of 82%) the probability of cost-savings was 30%. Intervening on all patients, or the subset with diabetes, was never cost-effective with a probability exceeding 5%. Intervening on patients with CKD was cost-effective at least 65% of the time even under the most pessimistic scenario. **Discussion:** Our findings illustrate that, for laboratory monitoring to be cost-effective using commonly accepted definitions, the patient population must be at high enough baseline risk of adverse events. Further inquiry into the willingness to pay for patient safety interventions is needed.

PS2-29:
Development, Implementation and Evaluation of a Web-based Curriculum on Pharmaceutical Marketing and Prescribing

April L Salisbury, MBA, *Lovelace Clinic Foundation*; Margaret J Gunter, PhD, *Lovelace Clinic Foundation*; Robert White, MD, *Lovelace Clinic Foundation*

Background/Aims: To develop, implement, and evaluate a web-based curriculum on drug marketing and prescribing with funding from off-label marketing lawsuit settlement funds. **Methods:** Content experts developed a course entitled "Optimal Prescribing" in two stages: a live pilot and a web-based course consisting of modules with slides, video clips, narration, cases, interviews, and interactive elements. The course was presented to physicians and midlevel providers from the Lovelace Health System in Albuquerque, New Mexico. Feedback was collected at the live pilot and participants were surveyed later, as well as a control group of providers who did not attend the pilot course, to assess the impact of the education on attitudes about relationships with industry representatives, the amount and source of information that guides prescribing decisions, and self-reported changes in prescribing patterns. Data were analyzed and summarized to revise the material to produce web-based modules for use by prescribers in the public domain. The final web-based, 3-credit course includes a pretest, posttest, and a 90-day follow up survey, which are currently being collected. **Results:** In the first two months the course was available, 173 people accessed it and 40 successfully completed it, earning credit (16 more took the posttest, but did not pass). Initial reports on the learner's performance show improvements on all posttest questions. Of the 20 questions 17 showed >10% improvement, with a maximum 37.12% improvement. The greatest improvements were in the learner's ability to: 1) acknowledge the fact that even very brief sales calls can result in a 16% increase in drug sales, 2) distinguish absolute from relative risk reduction, and 3) identify acceptable evidence for off-label choices. Of the total users, 78% would recommend this course to colleagues (29.35% said yes, enthusiastically). **Conclusions:** Optimal Prescribing has been piloted, revised, and launched as a web-based course, and is being accessed by a number of people with positive results; however, less than 25% have fully utilized the course and earned continuing education credit. Data collection and analysis will continue over the remainder of the 3-year life of the course and may lead to improvements in course design.

Research Administration

C-A1-01:
HMORN Administrator's Annual Review and Planning

The administrator's group will review the activities and projects that were planned during the 2008 conference and solicit ideas for the coming year. Please join in the discussion — we'd love to have participation from all member organizations. Current activities being discussed include Effort Reporting, Subcontract and Data Use Agreement Templates, Website Development, Organizational Structures and Benchmarking, Recruitment and Development of Research Administration Staff.

C-B1-01:
Using an Electronic Medical Record to Document and Track Research Activities and Expenditures

Ted E Palen, PhD, MD, MSPH, *Institute for Health Research, Colorado Permanente Medical Group*; Deanna Kurz, BA, CCRP, *Institute for Health Research, Kaiser Permanente Health Plan of Colorado*

Background: Patients enrolled in research studies need to have research related events such as laboratory orders and results, radiology orders and results, study related medications, diagnoses, adverse events, and other clinical events documented and tied to research encounters. Recording these activities within an electronic medical record (EMR) facilitates efficient tracking of resource utilization and cost accounting related to research activities. **Session Goals:** Using Epic Systems Corporation (Verona, Wisconsin) EMR, we will demonstrate how research encounters are scheduled, tied to a research study guarantor account, and how the research encounter is used to document research activities. We will demonstrate how