intervention letters on the recurrence of exceptions, multiple regression models were developed using prescriber-level mean time (in days) between exceptions. In addition, the effect on medical costs and utilization was measured for a subset of data using a post-pre design with a control group. Pre-post periods were defined as 120 days before and after the date of intervention letters dated between May 1 and August 31, 2003. Controls were selected by matching to intervention cases using the propensity score methods. Sensitivity analysis was performed using varying time windows and bootstrap samples. Outcomes related to PMPM inpatient admissions, emergency room visits, and physician office visits were analyzed. RESULTS: Of 51,214 prescribers who had two or more exceptions during the 23-month time period, 6233 (12%) were randomly selected to receive intervention letters (ranging from one to 19). Model coefficients indicated that the time to exception was longer by 6.5 days (p < 0.001) as prescribers received additional intervention letters, after adjusting for the number of exceptions, severity level, and average patient age. There were no significant differences in medication costs from pre to post time periods, or between groups (study vs. control). However, the study group had fewer PMPM inpatient admissions and emergency room visits. CONCLUSIONS: Retrospective drug utilization review processes can have a positive effect in delaying next exceptions for prescribers and reducing utilization of health care services.

A DYNAMIC MODEL OF BUDGET IMPACT ANALYSES
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OBJECTIVE: Budget impact analysis (BIA) evaluates financial impacts of new technologies; it provides valuable information to decision-makers with a budget concern. This study proposes a dynamic model to incorporate variations in patients mix and decision-makers with a budget concern. This study proposes a dynamic model to incorporate variations in patients mix and decision-makers with a budget concern. This study proposes a dynamic model to incorporate variations in patients mix and decision-makers with a budget concern. This study proposes a dynamic model to incorporate variations in patients mix and decision-makers with a budget concern.

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CAPTURING PATIENT-REPORTED COMPLIANCE DATA IN A NINE-COUNTRY PRODUCT REGISTRY USING MEMS CAP DEVICES
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OBJECTIVE: To capture patient compliance data on a prescribed concomitant medication of an international product registry. The data needed to be collected in an accurate, timely, non-burdensome, and cost-effective manner. METHODS: Several patient compliance measurement options were considered but not selected including: physician office surveys, telephone surveys, and proxy responses. We chose the Medication Electronic Monitoring Systems (MEMS), which is a standard plastic vial, and a cap for the vial that contains a micro-electronic circuit that records times when the cap is opened and closed. MEMS bottles and caps were given to participating clinicians with specific instructions for distribution to registry participants. MEMS were to be filled with a full 6-month prescription of the concomitant medication and distributed to patients at discharge. Patients were to be instructed to complete the prescribed regimen and received instructions on the use and purpose of the MEMS. They also were to receive written instructions on returning the MEMS to their clinician after 6 months. The clinicians were to return the MEMS caps to a centralized data processing center in the United States for analysis. RESULTS: MEMS were distributed to 707 patients, by 43 physicians, in 9 countries on 6 continents. The cost of distribution (including devices and mailings) was approximately $100.00 per patient. Delays in receiving MEMS caps from patients in a timely manner were experienced, as were delays in receiving MEMS caps from sites. Of the 240 MEMS devices administered, 26% returned the cap for analysis and 24% of the MEMS caps yielded analyzable data. CONCLUSION: Compared to other methods of collecting compliance data on a large international scale, MEMS provided a non-burdensome manner for collecting data. However, the low return rate indicates that this process must be monitored closely to maximize results, minimize costs and to ensure that patient utilization does not vary.

COMPARING PATIENT-REPORTED MEDICATION COMPLIANCE WITH ELECTRONICALLY MONITORED MEDICATION COMPLIANCE IN A 12-MONTH INTERNATIONAL REGISTRY
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OBJECTIVE: This study compares two compliance measurements, a telephone patient-reported survey and the Medication Electronic Monitoring System (MEMS), for a 12-month international registry studying re-intervention rates for interventional cardiology. METHODS: Patients were prescribed a 6-month anti-platelet drug regimen upon discharge from the hospital. Drug was supplied to all patients in a MEMS bottle, which contained an electronic cap that recorded internally the date and time the bottle was opened. At the end of six months, patients were to return the empty bottle to their provider for analysis. Patients included in this study were also contacted via telephone quarterly to recall their medication compliance status. The agreement between the two methods was evaluated using the weighted Cohen’s kappa statistic (Kw). RESULTS: Of the 778 patients enrolled in the registry, 707 were given MEMS devices, and of those patients, 642 have reached the 6-month endpoint. A total