

and will be enhancing, implementing, and pilot testing this intervention to support communication and prevent errors.

Keywords: Medication errors, Pediatric cancer, Health information technology

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C-B3-02:

Primary and Early Non-Adherence in an HMO Population

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Background: Adherence to prescribed medications is associated with improved health outcomes in many chronic conditions. Measures of adherence typically depend on administrative data from pharmacy dispensing databases and require a minimum of two drug dispensings to calculate (ongoing adherence). Patients who do not pick up the initial prescription (primary non-adherers) or who fill it only once (early non-adherers) are excluded from calculations based on pharmacy databases. Reasons for non-adherence in primary and early non-adherent patients could be different from those in patients with ongoing dispensings who discontinue or who are not fully adherent to their medications and could vary across diseases or drug classes. **Aim:** To characterize primary and early non-adherers among a population of patients with diabetes, hypertension, and/or hyperlipidemia enrolled in an integrated health system. **Methods:** We identified Kaiser Permanente Colorado (KPCO) members with a newly-initiated order for a medication of interest in 2007 and 2008. Orders were identified using electronic health record data; these orders were sent to the pharmacy information management system (PIMS). From PIMS we determined if/when dispensing occurred. We classified patients into ongoing adherence and primary and early non-adherence groups. If patients had new orders for more than one drug of interest, we classified them as early or primary non-adherers only if they were not in the ongoing adherence group for any of the drugs. Patients were also classified according to drug group (antidiabetic, antihypertensive, antihyperlipidemic, or multi-drug). **Results:** Of 15,417 patients with a newly-initiated order for a drug of interest, 1147 (7.4%) were in the primary non-adherence group and 3355 (21.8%) were early non-adherers. Individuals initiated on more than one drug were most likely to be in the ongoing dispensing group. Almost 10% (754 of 7636) of individuals prescribed an anti-diabetic or antihyperlipidemic drug did not fill their first prescription, twice as many as among those prescribed an antihypertensive drug. **Conclusions:** Excluding the relatively large proportion of patients who do not receive ongoing dispensings of a newly-initiated drug yields an incomplete picture of medication adherence and thereby the potential factors contributing to non-adherence. For example, we found primary non-adherence differed across therapeutic classes.

Keywords: Adherence, Medication, Chronic conditions

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PS2-32:

Barriers and Facilitators for Medication Adherence

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Background: Literature has shown many patients do not adhere to prescribed medications. To help understand factors related to medication adherence, we conducted a survey of adherent and non-adherent patients. **Objective:** To determine factors that serve as barriers and facilitators to medication adherence for patients with diabetes and asthma. **Methods:** We identified all members >18 years with at least two prescription fills for > 28 days' supply from January 2007-March 2009. We focused on medications (n=128) to treat depression, hypertension, hyperlipidemia, diabetes, asthma/COPD, multiple sclerosis, cancer or osteoporosis. Diagnoses were identified by ICD-9 code and merged with pharmacy claims. Adherence was calculated by the

Medication Possession Ratio at a threshold of 80%. We randomly selected 500 individuals with the two conditions with the poorest adherence to survey (asthma 32% and diabetes (51%), half of whom were adherent and half who were not. Using the ASK-20 questionnaire as our basis, we added questions about facilitators and barriers to adherence. **Results:** Approximately 30% of patients forget to take their medications, 16% run out of medication because they don't refill in time, and 22% had taken a medication more or less than prescribed in the past month. Barriers most commonly noted were an irregular schedule (22%), having to take pills with food (13%), and being too busy to keep prescriptions filled (12%). Facilitators most frequently reported were taking medications at the same time daily (95%) and using a weekly pill reminder (47%). We are currently analyzing open-ended comments to identify additional barriers and facilitators. We will also conduct a subgroup analysis (e.g., by gender, age). **Conclusion and Implications:** Building routine into one's medication-taking behavior appears to be a key factor to ensuring adherence. Finding ways to help patients in this effort remains an important consideration of the health plan. The findings of this study will help guide discussion within the health plan's pharmacy administration team to assist patients in their efforts to adhere to the medication regimens prescribed and thus maximize the benefits of prescribed therapies.

Keywords: Medication adherence, Barriers, Facilitators

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PS2-23:

Reducing Rehospitalization in Survivors of Critical Illness: Description of a Novel Interventional Strategy

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Background/Aims: Older patients who survive a critical illness are at increased risk for mortality and rehospitalization. Ten percent of ICU survivors discharged to home are rehospitalized within a week, and nearly one-third are readmitted within 180 days. Contributors to these negative outcomes may include complex discharge plans, unrecognized ICU-associated illnesses and separation of inpatient and outpatient medicine through shorter outpatient visits and the hospitalist movement. These factors contribute to the challenges of care transitions and further limit the care coordination of the ICU survivor with complex medical problems. The purpose of the project is to pilot a model of transitional care for older ICU survivors. We propose an innovative model of transitional care for older ICU survivors that has the potential to reduce rehospitalization rates, improve morbidity and decrease risk of mortality. **Methods:** We will target patients 55 years of age or older who have survived a critical illness in the medical ICU and are to be discharged home. We will exclude patients who are unwilling or unable to assume patient responsibilities. Patients (and caregivers) will be empowered through the support of a transitional coach who encourages the patient and caregiver to have a more active role in the health of the patient. Such efforts include medication reconciliation, identification of patient-selected goals, and education about self-management and communication of medical issues. The ICU Survivors Follow-up Care Clinic will be created to address ICU-specific issues that we believe may contribute to the negative outcomes of critical illness. Through these two interventions, we will create a detailed care plan and deliver a coordinated handoff to the primary care physician. **Results:** The project will be evaluated for feasibility and effectiveness using the RE-AIM framework. We will conduct cost analysis to determine the long term sustainability of the program. **Conclusions:** Older ICU survivors are at risk of hospital readmissions for many reasons. A novel program that integrates patient empowerment and early recognition and follow-up of ICU associated illness may impact these negative outcomes.

Keywords: Rehospitalizations, Chronic disease management, Critical illness

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C-B4-01:

Provider Experience Using a Web-based Tool for Chronic Disease Management in Primary Care

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