

and describe the results of dissemination efforts with professional organizations.

Keywords: Standardized measures, Data harmonization

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C-B4-04:

Overestimation of Population Level Medication Adherence: Bias in the MPR Calculation of Hypertensive Patients

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Background/Aims: The Medication Possession Ratio (MPR) is a common claims-based metric for describing medication adherence. The MPR can only be calculated for patients who fill at least 2 prescriptions. Thus, patients with <2 prescription fills are excluded from the MPR denominator in population-level adherence reports. Combining prescription-ordering data available in an electronic health record (EHR) with matching claims data, we characterized the population excluded from a MPR-based adherence calculation. **Methods:** We conducted a retrospective (2004-2008) analysis of EHR and claims data for patients treated in the Geisinger Clinic. Hypertensive patients continuously enrolled for at least two years in the Geisinger Health Plan (GHP) with GHP pharmacy benefit coverage were identified using blood pressure (BP) data in the EHR and ICD-9 codes associated with clinic encounters. For all patients with an EHR order for an angiotensin converting enzyme inhibitor (ACEI) or an angiotensin receptor blocker (ARB), we matched each EHR order with the corresponding claim if one existed. **Results:** We identified 89,403 patients with hypertension, of whom 14,387 (16.1%) had at least 2 years of continuous pharmacy benefits. Median age was 67 years and 51% of the cohort was female. There were 4,934 patients with = 1 order for an ACEI and 1,251 patients had = 1 order for an ARB. The MPR could not be calculated for 18.8% (n=928) of patients based on ACEI orders and for 32.3% (n=404) of patients based on ARB orders. Patients for whom the MPR could not be calculated had a higher systolic BP than patients with an MPR measure (137 compared to 134 for patients with an ACEI; 139 compared to 134 for ARBs), and a higher diastolic BP (77.91 compared to 76.92 for ACEI; 76.16 compared to 75.33 for ARBs). **Conclusion:** In this primary care population, a sizable proportion of patients failed to fill more than one antihypertensive prescription. These patients are likely to be excluded from population level adherence estimates. Further analyses will examine differences between the "MPR" cohort and those patients excluded from the calculation.

Keywords: Medication adherence, MPR

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PS1-16:

The Role of Health Information Technology Regional Extension Centers in Health Care Transformation

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Background/Aims: To encourage the adoption and "meaningful use" (MU) of electronic health records (EHRs) as part of health care reform and the ARRA stimulus legislation, the federal government is providing financial incentives to providers who adopt certified EHRs and meet criteria for their meaningful use. The federal Health Information Technology (HIT) Regional Extension Center (REC) program was created to provide technical assistance (TA) to priority primary care providers (PPCPs) in small practices to help them adopt EHRs and qualify for MU incentives. The New Mexico HITREC is one of 62 nationally, each of which will assist 1000+ providers. Such groundbreaking incentives and assistance present a potential EHR "tipping point" for small practices. **Methods:** NM HITREC recently began to address its goals for the two year funding: Outreach to educate providers through conferences, presentations, and one-on-one contacts concerning the MU criteria and incentives and the benefits of the TA available through the REC; recruitment of PPCPs willing to adopt EHRs and receive HITREC assistance;

promotion of HIT workforce training programs; assisting providers with selecting and implementing EHRs; connecting to the state's health information exchange; using EHRs for performance measurement and other MU criteria; sharing effective tools with other RECs; and participating in local and national evaluation efforts. New one-on-one recruitment procedures have been undertaken recently and are proving more effective. **Results:** NM HITREC is in its early months of recruitment, and has signed approximately one fourth of the potential providers as of November 1, 2010. This number is under the goal set for this stage, but the rate of recruitment has been increasing using the new recruitment techniques. It is anticipated that 800 or more will be recruited by late March, 2011. These results will be reported at the March conference, along with early EHR implementation successes and insights. **Conclusions:** It is anticipated that the experience gained by the RECs will expedite the implementation of EHRs in small practices and provide guidance even to large and specialty practices seeking to achieve MU. This in turn should have a transformational effect on quality and efficiency for providers in all practices.

Keywords: Electronic health record, Meaningful use, HIT Regional Extension Center Program

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PS1-15:

Fathoming the Depths – Looking for Treasure in the Electronic Medical Records of Western Washington Network Enrollees

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Background/Aims: When a particular health event or condition is uncommon, researchers consider broadening the target population. All Group Health (GH) patients have an electronic medical record (EMR). However, GH EMR implementation has only occurred at GH-owned clinics. For studies requiring medical record review in addition to other data collection, the practice has been to include only enrollees at GH-owned clinics. However, perhaps EMR data are more widely available. We conducted a pilot study of: How many GH network enrollees (i.e. enrolled at non-GH owned clinics) have GH EMRs that contain clinical data? What kinds of visits generate rich data in the EMR for network enrollees? **Methods:** Our population was Group Health (GH) enrollees enrolled at network clinics in western Washington. Although this population is demographically comparable to enrollees at GH-owned clinics, the assumption has been that clinical data in the EMR is missing or meager, making them poor candidates for studies requiring chart review. We examined 4 indicators (patient use of the shared medical record, or presence of scanned documents, transcriptions, or vitals in EMR automated data). We chose these as likely markers of clinical information in the GH EMR, and randomly selected 5 enrollees for each indicator and reviewed their EMRs. **Results:** Among enrollees at network clinics, 20% (10,327/51,637) had at least one of the four selected indicators. Only 1 of the 20 records reviewed had no clinical EMR data. The best indicator of a rich EMR was presence of vitals. **Conclusion:** Enrollees at network clinics with visits to GH clinics (or with recorded vitals in EMR automated data) may thus be a suitable target population to add to studies that include chart review. However, this may only add 1/5 of all network enrollees to a study population. Future investigations might include: 1) Select enrollees at network clinics with hospitalizations to see what outside utilization is captured by the GH EMR; 2) Examine how health plan type affects availability of EMR data.

Keywords: Electronic medical record, Network

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PS1-01:

Infrastructure Setup for the Informatics for Integrating Biology and the Bedside Framework

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