

Background: With mounting economic burdens of diabetes and its complications, its implications on dental cost are not well studied. Diabetes has been established as an important risk factor for periodontal disease and subsequent tooth loss, but surprisingly few longitudinal studies have examined the relationship between diabetes and dental care costs. Objective To evaluate associations between diabetes and costs of dental care from a 5-year prospective observation of the insured with and without diagnosed diabetes. **Methods/Research Design:** This was a cohort analysis using linked data from Washington Dental Service and Group Health Cooperative on enrollees continuously and dually insured from 2002-2006. Adults with and without diabetes were matched on baseline characteristics using propensity scores and then compared on 5 years of follow-up dental costs. **Results:** Of the 49,023 linked enrollees that met the study inclusion criteria, 4,038 (8.24%) enrollees met criteria for diabetes. Post matching results show that adults with diabetes had 3% lower attendance to a dentist compared to the matched controls ($P < 0.001$). Among those with a dental visit, diabetes patients were costlier than the control group in non-surgical periodontal procedures, extractions and removable prosthetics ($P < 0.001$ for all) and were less expensive in diagnostic, preventive and restorative (fillings and crowns) procedures ($P < 0.001$ for all). There was no significant difference in total dental care cost between the two groups. **Conclusions:** Despite the lack of difference in total cost for dental care, the distribution of costs across procedure-classes was significantly different for patients with diabetes with higher emphasis on tooth replacing procedures than tooth-retaining procedures. In an administrative services-only arrangement with indemnity and PPO plans, the improved utilization of preventive dental care could accrue cost savings to patients and employers through reduction in downstream costs related to intensive procedures and in indirect costs related to lost productivity and time.

Keywords: Diabetes, Dental costs

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Interventions and Clinical Trials

PS1-10:

The Effectiveness of Screening and Brief Intervention on Reducing DWI Citations

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Objective: The purpose of this study was to use retrospective data to assess the long-term effectiveness of screening and brief intervention (SBI) for at-risk alcohol users and its impact on traffic safety by looking at DWI citations. A second objective was to study ethnicity differences in response to SBI. **Method:** During the time period from 1998 to 1999 LCF Research, together with the Lovelace Health System, participated in the Cutting Back study of screening and brief intervention for at-risk drinkers. A total of 426 subjects exhibiting at-risk drinking behaviors from the New Mexico cohort included 211 subjects who received a brief intervention and 215 in the control group who received usual care were used for the study. This study examined DWI citations for all 426 subjects during the five years following the Cutting Back study. **Results:** The brief interventions were shown to have had a significant impact on reducing DWI citations for at-risk drinkers with the benefit lasting for the 5 years duration of the study. The screening and brief intervention was found to be most effective in reducing DWI citations for Hispanic at-risk drinkers. **Conclusion:** Evidence is presented to support that screening to identify at-risk drinkers followed by a brief intervention has a statistically significant lasting impact on improving traffic safety.

Keywords: SBI, DWI, Intervention

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PS1-37:

Preliminary Findings of a Shared Decision-Making Exploratory Study: Improving Rates of Appropriate Aspirin Use

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Background/Aims: Prophylactic aspirin use is recommended for reducing the risk of stroke in women and myocardial infarction in men. The United States Preventives Services Task Force (USPSTF) recommends a shared decision-making approach between patients and providers to consider the benefits and harms of daily aspirin use. We conducted an exploratory study using a three-arm randomized controlled approach to compare usual care to two tools that could facilitate shared decision-making. **Methods:** Subjects at risk for cardiovascular disease (CVD) were randomized at three clinic sites at Geisinger. Intervention patients received either: 1) a printed "pre-visit summary" (PVS) that described their specific Framingham CVD risk, benefits of aspirin use, and harms of GI bleed (PVS-only arm); or 2) PVS plus an interactive, graphical clinical decision support (CDS) tool embedded in the electronic health record for providers to use during the clinical encounter (PVS+CDS arm). Control patients were given neither tool, but were followed to monitor secular trends. Patients were surveyed within four weeks of their visit and asked about conversations about aspirin with the clinician and appropriate use. All analyses were intention-to-treat. **Results:** Conversations about appropriate aspirin use between patient and provider occurred for 52% of PVS+CDS subjects, 39% of PVS-only subjects, and 19% of control subjects. Aspirin was initiated by 31% of PVS+CDS subjects, 24% of PVS-only subjects, and 17% of control subjects. "Daily" aspirin use (defined as at least 3-4 times a week) was reported by 27% of PVS+CDS subjects, 17% of PVS-only subjects, and 8% of control subjects. All differences between the three study arms are statistically significant ($P < 0.05$). Additional analyses are underway. Less than 10% of providers in the PVS+CDS arm activated the shared decision-making tool. We will conduct interviews with providers to better understand the low activation rates. **Conclusions:** In an exploratory study, we demonstrated clinically meaningful and significant improvements in discussions of appropriate aspirin use between patients and their providers, which correlated with aspirin initiation and regular use, in a population of adults at risk for cardiovascular disease. Shared decision making via health information technology can activate patients and providers resulting in increased use of appropriate preventive care.

Keywords: Shared decision-making, Aspirin

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PS1-03:

Expanding the Functional Scope of Institutional Review Board Review of Multi-Site Research in the HMO Research Network: from Data-Only Studies, to Non-Clinical Interventions, to Clinical Trials

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Background/Aims: The member institutions of the HMORN have long been concerned about their ability to conduct multi-site research in a timely and efficient manner. Frequently in the past, investigators in multi-site studies have felt constrained by the requirement of submitting proposed research to multiple IRBs. In June 2008, the HMORN Governing Board approved a Standard Operating Procedure (SOP) that streamlined this submission process for data-only studies (Version 1), and in September 2010, the SOP was revised (Version 2) to permit the inclusion of all HMORN multi-site research except clinical trials. IRB Administrators and Directors from around the HMORN met in December 2010 to discuss strategies for harmonizing clinical trials review as well as establishing a Network-wide IRB Authorization Agreement for the conduct of HMORN multi-site research. **Methods:** Investigators from around the HMORN have been queried regarding their knowledge of and experiences with Version 1 of the SOP, with an aim being to improve both the visibility and efficiency of the process. Version 2 incorporates their suggestions. The results of the December 2010 meeting of