[1]Group Health Research Institute; [2]Kaiser Permanente Southeast

Background/Aims: Informatics for Integrating Biology and the Bedside (I2B2) is a data querying tool enjoying increased use among HMORN members. While I2B2 uses standard software and includes installation documentation from the developers, many parts of the installation and configuration process are challenging to implement. Simplifying the initial setup removes a significant barrier to adoption. **Methods:** A combination of simplifying assumptions (limiting choices) and scripts (reducing manual file edits) were developed to reduce time-consuming and error-prone steps in the I2B2 installation process. **Results:** Following the procedure developed, a new I2B2 installation can be a predictable and straightforward process. **Conclusions:** Simplifying the installation and initial configuration of the I2B2 infrastructure provides multiple benefits. If your organization is new to I2B2, you will be able to reach the goal of using I2B2 more quickly by following our process. If you have a need to create multiple I2B2 instances - to test different data loading approaches or different ontologies - our process will allow you to quickly create a development or a test/quality assurance installation of I2B2.

Keywords: I2B2, Infrastructure

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PS1-41:

Implementing an XML-Based Query Tracking System (whether you want one or not)

William Tolbert, MA; Group Health Research Institute

Background/Aims: Systems that lower technical barriers todata access are generally viewed positively. After all,why tie up programmer resources when a simple web-basedquery system like I2B2 makes complex queryingstraightforward? Quick and painless summary information isvery useful for research.The downside is that easy data access means the potentialfor abuse increases. Currently, programmers serve asgatekeepers. Programs and meeting notes serve asrudimentary audits of who asks what questions of our data.Easy data access gives the impression that no knows and noone is looking at the queries.Group Health Research Institute has created an I2B2 queryaudit system to serve two functions. First, users know thesystem is tracking their queries. Second, in the eventthat sensitive data are disclosed, the audit system mayallow stakeholders to determine who was responsible. **Methods:** This presentation will demonstrate a querytracking system that exploits the XML capabilities of I2B2. **Results:** The presentation will cover the technical aspectsof XML and associated technologies and provide an overviewof web-based technologies including Apache and PHP. We will conclude by raising some interesting questionsrelated to query tracking. For example, if we agree thatquery tracking is a good idea, we must then consider whohas access to the queries. Should we be concerned aboutsomeone taking our ideas and getting a jump on a grant application? **Conclusions:** Query tracking is a technical problem thatcan be solved. This presentation illustrates one approach.However, query tracking raises many questions that must beaddressed as we embrace easy access data systems suchas I2B2.

Keywords: I2B2, XML

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PS1-07:

Comparing Dental Utilization Among Diabetic & Matched Non-Diabetic Adults in an Insured Population

Monica Chaudhari, MS[1]; Rebecca Hubbard, PhD[2]; Robert Reid, MD, PhD[2]; Ronald Inge, DDS[1]; Katherine Newton, PhD[2]; Leslie Spangler, PhD, VMD[2]; William Barlow, PhD[2]

[1]Washington Dental Service; [2]Group Health Research Institute

Background: About one-third of adults with diabetes have severe oral complications. However, limited previous research has investigated differences in dental care utilization between adults with and without diabetes. **Objectives:** To compare dental care utilization between adults with and without diabetes using a novel application of hurdle models, a statistical approach that decomposes utilization into components representing the decision to use services, the specific type of services used, and the amount of services used. **Methods/Research Design:** We conducted a retrospective cohort study using data from Washington Dental Service and linked records from Group Health Cooperative on enrollees continuously and dually insured between January 1, 2002 and December 31, 2006. Five years of follow-up dental utilization was compared between adults with and without diabetes. Propensity score matching was used to adjust for differences in baseline covariates between the two groups. **Results:** Post-matching multivariable results show that adults with diabetes had lower odds of visiting a dentist (OR=0.74, $P<0.001$). Among those with a dental visit, patients with diabetes had lower odds of receiving prophylaxes (OR=0.77, $P<0.001$), fillings (OR=0.80, $P<0.001$) and crowns (OR=0.84, $P<0.005$) and higher odds of receiving periodontal maintenance (OR=1.24, $P<0.001$), non surgical periodontal procedures (OR=1.30, $P<0.001$), extractions (OR=1.38, $P<0.001$) and removable prosthetics (OR=1.36, $P<0.001$). **Conclusions:** Our results underscore the need to instill appropriate changes in oral care seeking behavior that will help adults with diabetes receive early intervention, possibly reducing subsequent severe oral disease and costs. We recommend that organizations focused on oral health and diabetes care work jointly to initiate programs that educate patients with diabetes about preventive care and promote periodic dental visits. We also recommend that dental carriers not only increase dental coverage for adults with diabetes but also develop incentive products to promote preventive care seeking behavior.

Keywords: Diabetes, Dental care utilization

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Health Insurance and Economics

C-A5-04:

Quasi-Experimental Evaluation of a Value-Based Health Plan Design Among Healthcare Employees

David Grossman, MD, MPH[1]; Paul Fishman, PhD[1]; Arne Beck, PhD[2]; Robert Reid, MD, PhD[1]; Debra Ritzwoller, PhD[2]; Diane Martin, PhD[3]; Nora Henrikson, PhD[1]; Rebecca Hubbard, PhD[1]; Aaron Scrol, MA[1]

[1]Group Health Research Institute; [2]Kaiser Permanente Colorado; [3]University of Washington School of Public Health

Background/Aims: Value-based health insurance products are rapidly gaining popularity and interest among large employers. To date, few data exist to inform policymakers regarding the impact of these plans on health, productivity and costs. The aims of this study are to determine the impact of a novel value-based health plan on employee worksite productivity, health status, healthcare quality, and employee satisfaction at a large employer. **Methods:** This study is a quasi-experimental time-series design with two groups. The intervention group is employees of Group Health Cooperative (GHC) who receive health benefits; the control subjects are employees of Kaiser Permanente Colorado (KPCO). Starting in 2010, the Group Health employees' health plan introduced free and reduced copays for drugs associated with treatment of six chronic diseases, waiver of copay for a fixed number of chronic care visits and devices and increased cost shares for high end imaging. Staff receives a 450 dollar discount on premiums if they complete a health assessment and engage in health behaviors. No changes were experienced at KPCO. Key outcomes will be assessed with a combination of linked survey (for workplace productivity, health status and behavior, satisfaction); claims (for utilization, quality, cost); and human resources (for absenteeism and demographics) data from 5000 randomly selected subjects at each site. Descriptive statistics and GEE regression will be used to characterize differences in outcomes over time between groups. **Results:** Ninety two percent of GHC employees completed the baseline health assessment to qualify for a premium discount. Baseline survey results sent to selected subjects resulted in 73% and 59% response rates from GHC and KPCO respectively. Approximately 62-64 percent agreed to linkage of survey and administrative data. Baseline survey data indicate comparable populations with respect to gender (both 80% female), marital status (both 69% married/partner), education and race (both 79% white) with modest