

we used SAS to produce a longitudinal plot encompassing all weight measurements, antipsychotic fills, pregnancy- and cancer-related visits, and steroid and insulin medications fills. Graphs were independently reviewed by investigators at each site and categorized as a) confirmed case, b) possible case, c) pre-treatment weight loss, and d) excluded, based on pre-specified criteria. Where disagreement occurred the graphs were re-reviewed concurrently by both research teams to reach a consensus. **Results:** We identified and graphed 922 cases at both sites who met eligibility criteria and had gained >15% weight on drug treatment. Each graph simultaneously depicted 14 possible measurement categories including weight, 9 antipsychotic drug types, insulin fills, oral steroid fills, cancer- and pregnancy-related visits. After each team examined all graphs subjects were categorized as 129 (14.0%) confirmed, 155 (16.8%) possible, 83 pre-treatment weight loss (9.0%), and 555 (60.2%) excluded cases. **Discussion:** Using a novel graphical display, we rapidly reviewed temporal exposure information on large samples to facilitate case identification. As the temporal exposure information in these subjects was very complex, a standard SAS-programmed exclusion algorithm without graphical review would have likely induced selection bias.

Keywords: Visual methodology; Antipsychotic Medications; Mega-epidemiology and Methods

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PS2-61:

Establishment of a Cohort of Women to Study the Effect of Cervical Procedures on Reproductive Health Outcomes

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Background/Aims: Persistent oncogenic human papillomavirus (HPV) infection may lead to precancerous lesions, which health providers may remove using surgical procedures before the lesions progress to cervical cancer. This paper describes the methods used to establish a retrospective cohort of Kaiser Permanente Northwest (KPNW) members to test hypotheses that surgical procedures involving the cervix affect subsequent reproductive health and pregnancy outcomes. **Methods:** The HMORN Virtual Data Warehouse (VDW) was used to obtain health plan enrollment, diagnosis, procedure, pharmacy, and demographic data for 14- to 53-year-old female KPNW members during the study years, 1998-2009. A list of CPT and ICD-9 codes was used to identify women who were exposed to destructive or excisional procedures of interest. A group of unexposed women was selected by frequency-matching on age. Contraceptive data for all women in the cohort was pulled to account for time on and off various contraceptive methods, including: oral contraceptives, intrauterine devices (IUDs), implantable and injectable hormonal methods. **Results:** An age-matched cohort of 86,898 women was retrospectively established to compare the reproductive health outcomes of 4,138 women who were exposed to surgical cervical procedures to a 1:20 age-matched group of unexposed women. The demographic and contraceptive method use characteristics were similar for the exposed and unexposed members of the cohort. However, a greater proportion of exposed women than unexposed women used contraceptives at some point during the study period. **Conclusions:** We used the VDW tables to establish a retrospective cohort of women in which the effect of cervical procedures related to precancerous cervical lesions on reproductive health outcomes may be studied. An analytic dataset has been set up to perform Cox proportional hazards regression analyses adjusting for contraceptive use

Keywords: HPV; Cervical Procedures; Mega-epidemiology and Methods
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Mental Health

PS2-17:

What Happens When Adult Patients Cry in Primary Care Visits?

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Background/Aims: Didactic training in medical education on how to address significant emotional distress is inadequate. Even if unfamiliar with mental health assessment tools, any physician presumably can recognize distress when presented with an adult crying. This study describes the reasons disclosed during routine periodic health examinations (PHEs) for patient crying and how primary care physicians respond to this distress. **Methods:** The 9 cases where patients cried during a PHE were identified from an existing observational study of 322 audio-recorded office visits in 26 clinics of an integrated delivery system in Detroit and surrounding suburbs between 2007-2009. All patients were insured and aged 50-80 years. Physicians were general internal and family medicine physicians practicing with a salaried medical group that includes provision of comprehensive behavioral health services. Administrative claims data for the spanning 12-months before and after the visit were joined with audio-recordings. Content analysis was used to explore patient-stated reason(s) for crying and the physician's response to the patient's crying. **Results:** We found that most patients (6/9) began to cry within approximately the first five minutes of the visit. Suffering from emotional pain was the main disclosed precipitator for patient's crying, the most common trigger being bereavement over the death of a loved one (5/9). Physicians' responses to patient crying ranged from immediate (7/9) or delayed (1/9) statements of empathy to one case of no expression of empathy. Most physicians performed some inquiry of mental health or recommendation for behavioral health treatment for the patient (8/9). Among those, only three patients were asked more than four of the recommended PHQ9 diagnostic questions for depression. **Discussion:** Most patients who cried during routinely scheduled PHEs did so over psychosocial issues. Nearly all of the physicians provided some expression of empathy within moments of the patients' tears. However, when assessing the patient's mental health status, physicians did not ask all of the diagnostic questions for depression, nonetheless in some cases provided a depression visit diagnosis code. A patient crying during a visit can be viewed as clear signal of patient distress and possible need for professional help to alleviate suffering.

Keywords: Medical Education; Primary Care; Mental Health

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PS2-19:

Developing an Automated Surveillance for Fetal Alcohol Syndrome Using Electronic Medical Records

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Background/Aims: Prenatal alcohol exposure is the leading preventable cause of birth defects and developmental disabilities. The full diagnosis of Fetal alcohol syndrome (FAS) requires assessment of: 1) prenatal exposure to alcohol, 2) facial dysmorphism by a geneticist, 3) restricted growth parameters, and 4) central nervous system (CNS) abnormalities as denoted by small head circumference/structural anomalies, neurological deficits, and/or significant functional deficits. Using integrated information available at one source, we assessed the feasibility of developing an FAS surveillance system using the Kaiser Permanente Georgia (KPGA) Health Plan EMR. **Methods:** Using EMRs, we extracted relevant information on the three main areas of FAS case definition (facial features, restricted growth, and CNS abnormalities). This was done among children up to the age of 10 years at the time of the diagnosis (including birth). Due to lack of ICD-9 codes for many of the facial features, we scanned the physician progress notes for relevant terms. These data were synthesized and applied to the FAS case definition algorithm. **Results:** (at the time of the submission – these results may change