environmental change strategies. To help evaluate the impact of these initiatives we have created a measure of estimated strategy-level impact that we refer to as ‘population dose’ that provides an overall estimate of the impact of a strategy on food and physical activity behaviors. We provide a definition and examples of measuring population dose and show how the concept was used in an evaluation of the Kaiser Permanente’s Healthy Eating, Active Living Community Health Initiative in Northern California (HEAL-CHI). **Methods:** HEAL-CHI was a community initiative designed to reduce obesity by implementing community- and organizational-level policy and environmental changes in three low-income communities in Northern California. Population dose was defined as the product of reach (number of people exposed to an intervention strategy) and strength (change in behavior for each person reached). Since quantitative effect sizes for policy and environmental change interventions are generally unavailable, we used a three-level rating system to assess the strength of each intervention strategy, combining evaluation results with estimates of intensity. We then examined data from youth surveys to assess whether population-level changes from the youth surveys were greater where high- dose strategies were present. **Results:** The HEAL-CHI population-level results were inconclusive overall, but showed positive and significant findings for four of the nine youth survey comparisons where “high dose” strategies were implemented, primarily physical activity interventions targeting elementary and middle school-age youth. For example, the percent of children reporting exercising at least 20 minutes per day increased from 61% to 67% in a community implementing a high-dose after-school physical activity program, a statistically significant ($p<.05$) increase relative to comparison schools. **Discussion:** The concept of population dose provides a way of comparing the potential community impact of different obesity prevention strategies and combining the estimates from multiple strategies to get an estimate of cumulative impact. In addition, we found that for the HEAL-CHI communities where there were high dose strategies in place there were a number of significant and positive population-level behavior changes.

Keywords: Community Health Initiatives; Obesity Prevention; Obesity
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CA4-05:

Electronic Health Record Phenotyping to Define Rate of Extreme Weight Gain Associated with the Use of 2nd/3rd Generation Antipsychotic Medications

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Background/Aims: Weight gain is an undesirable side effect of treatment with 2nd/3rd generation antipsychotic drugs which may have genetic determinants. A number of candidate genes have been analyzed but no genome-wide association studies (GWAS) have yet been reported. The purpose of this study was to determine the rate of extreme weight gain (EWG) among adult users of 2nd/3rd generation antipsychotic medications for future GWAS. **Methods:** A standardized dataset was extracted on antipsychotic medications users at Group Health and Geisinger Health System from 2004-2010 that included demographics, enrollment, vitals, and pharmacy data. Electronic health record search algorithms were used to identify adult subjects with body weight increases of 15%+ within one year of the initiation of new 2nd/3rd generation antipsychotic drugs. To adjudicate the association of EWG with drug treatment, SAS was used to plot and visually inspect a single graph for each episode that encompassed all weight measurements, antipsychotic orders/fills, pregnancy- and cancer-related visits, and steroid and insulin orders/fills over time. The rate of EWG was then compared among the common types of antipsychotic medications. **Results:** There were 7128 episodes of antipsychotic use that qualified for analysis (5251 patients). The most common medication types were quetiapine ($n=2543$), risperidone ($n=1817$), aripiprazole ($n=1315$), olanzapine ($n=971$), and ziprasidone ($n=413$). The least common medications were clozapine ($n=37$), olanzapine/fluoxetine ($n=23$), and paliperidone ($n=9$). EWG was identified for 275 of the 7128 episodes (3.86 per 100 episodes). EWG was significantly different among common medication types ($p\text{-value}<0.0001$). EWG was highest for olanzapine (5.46 per 100 episodes, 95% CI=[4.77, 6.24]), followed by quetiapine (3.93 per 100 episodes, 95% CI=[3.25, 4.75]), risperidone (3.58 per 100 episodes, 95% CI=[3.14, 4.07]), and aripiprazole

(3.50 per 100 episodes, 95% CI=[2.65, 4.62]). For ziprasidone, EWG was 2-3 fold lower (1.69 per 100 episodes, 95% CI=[1.46, 1.96]). EWG was not significantly different between Geisinger and Group Health (4.43 per 100 episodes versus 3.65 per 100 episodes, $p=0.157$). **Discussion:** Rates of EWG differed significantly by type of 2nd/3rd generation antipsychotic medication, which was consistent in two geographically diverse populations. Future GWAS may help determine if genetic determinants of EWG are drug specific.

Keywords: Extreme Weight Gain; Antipsychotic Medications; Obesity
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PS2-25:

An Adaptation of Behavioral Pediatric Obesity Treatment for the Real World: Results from the Group Health Family Wellness Program Pilot Trial

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Background/Aims: The US Preventive Service Task Force recommends intensive behavioral treatment for children with BMI >85 th percentile, but these programs typically rely on individual contact, making them costly and infeasible in health care. In response, we developed a group-based program, the Family Wellness Program (FWP), and piloted it in a primary care setting as a proof-of-concept. **Methods:** The single-arm FWP pilot teaches behavioral skills such as monitoring, goal setting, problem solving, contingency management, environmental control, and relapse prevention in separate parent and child groups. Pediatricians referred eligible families—a child aged 6-12 years with BMI $\geq$ the 85th percentile and a parent with BMI ≥ 25 —and FWP staff followed up by phone for recruitment. Masters-level interventionists facilitated the weekly group sessions. Contact hours were 13 (over 12 weeks) for the first four cohorts and increased to 20 (16 weeks) for the last two cohorts. Primary outcomes were attendance and child and parent BMI. We present results from the first five cohorts, with a sixth underway. **Results:** Thirty-seven families enrolled, representing 33.6% (37 of 110) of those invited. Of families enrolled, 46.0% (17 of 37) completed the program (i.e., attended at least 75% of sessions); they constitute the study sample. All children (17 of 17, 100%) and most parents (12 of 17, 70.6%) were obese at baseline (BMI ≥ 95 th percentile for children, BMI ≥ 30 for adults). Immediately post-treatment, mean change in child BMI z-score was -0.11 (SD=0.12). BMI z-score decreased by .05-.10 in 6 children (35.3%) and by .10-.50 in another 6 (35.3%). In 5 children (29.4%), BMI z-score was unchanged (decrease of 0-.05). Mean change in parent BMI was -1.09 (SD=1.42), with 76.5% (13 of 17) having reduced BMI post-FWP. **Conclusions:** A group program for family-based behavioral pediatric weight management is feasible; however recruitment and retention are major challenges. Despite the FWP’s low intensity, child and parent BMI changes among completers are promising. A next step will be to increase the program’s intensity to that recommended by the USPSTF (>25 contact hours). Group-based treatment may represent a promising strategy for addressing pediatric obesity in health delivery systems.

Keywords: Pediatric; Obesity
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PS2-26:

Using Shared Decision Making to Ensure Equipose in a Randomized Trial of Bariatric Surgery Versus Behavioral Treatment for Obesity and Diabetes

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Background: Gastric bypass (RYGB) can reverse type 2 diabetes (T2DM); however, a lack of randomized controlled trials (RCTs) comparing RYGB against medical therapy has limited widespread use. Barriers to conducting RCTs include: challenges recruiting informed patients willing to be randomized to surgical or non-surgical treatment who are not coerced by financial incentives or access to care, selection biases associated with