

should analyze changes in clinical quality metrics (e.g. HbA1c value) after PCMH interventions are implemented.

**Keywords:** Medical Home; Utilization; Learning Health Care Systems  
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CA8-04:

### Health Plan Implementation of a Major Risk Mitigation Initiative for Chronic Opioid Therapy

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**Background/Aims:** Increased opioid prescribing for chronic non-cancer pain has been accompanied by large increases in prescription opioid abuse and overdose. In April 2011, when the US government initially outlined a plan of action to stem a national epidemic of prescription drug abuse, Group Health (GH) had already implemented a major initiative to increase opioid prescribing safety. Group Health Research Institute had been conducting NIH-funded research on Chronic Opioid Therapy (COT). This research had shown rapid growth in COT prescribing and significant dose-related risks.

**Methods:** Phased implementation of GH's COT risk mitigation program included: designating a responsible physician for managing COT for each patient; developing care plans; periodic monitoring visits and urine drug screening guidance; standardized treatment agreements; and modifications to refill ordering processes. The guideline was supported by practice alerts, practice tools, performance measures, on-line training, and advocacy from medical staff leaders. Peer experts were trained in each clinic to support implementation. A 90 minute on-line educational program, including 11 clinical scenarios, was completed by primary care staff. In-clinic meetings were held to discuss standardization of COT management. **Results:** Physician ratings before and after completing the on-line course showed increased confidence in managing chronic pain patients, and more conservative attitudes toward COT prescribing. Within 9 months, care plans were developed for almost 6000 COT patients, 85% of the initially targeted population. Among all COT patients, the percent receiving urine drug screening in a year increased from 7% in the baseline year and 13% in the planning year, to 50% in the initial year of implementation. Among COT patients on higher doses (>120 milligrams morphine equivalent average daily dose), the corresponding percentages receiving urine drug screening were 15%, 21% and 64%. Trends in the percent of adult patients receiving COT and trends in average daily dose of COT patients will also be reported.

**Discussion:** The response of a learning health care system to an emerging prescription drug-abuse crisis exemplifies how integration of public domain research into efforts to improve health care quality and safety can serve patients and the broader public interest.

**Keywords:** Chronic Opioid Therapy; Guideline Implementation; Learning Health Care Systems

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CA8-05:

### Communication Problems and Preferences of Limited English Proficient Spanish Speakers in a Predominantly English-oriented Medical Setting

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**Background/Aims:** To investigate communication problems and preferences of Limited English Proficiency Spanish speakers in a predominantly English-oriented medical care system. **Methods:** Waiting room survey (self-administered questionnaire) conducted January-October 2011 at 5 Kaiser Permanente Northern California facilities (incl. 4 Latino Health Modules). **Study Sample:** Patients classified based on self-report as having Very Limited English Proficiency (VLEP, n=1527, doesn't speak English at all or not well) or Limited English Proficiency (LEP, n=431, speaks English well, but not very well). The sample included 380 women and 169 men aged 18-39, 681 women and 294 men aged 40-59, and 290 women and 108 men aged = 60. By age group, 74.1%, 79.2%, and 80.2%, respectively, were classified as VLEP, with women comprising approximately 71% of VLEP and 60% of LEP in each age group. Over 85% came from Mexico or Central America. **Results:** • Educational attainment very low in both LEP and VLEP

groups, but across all age groups, significantly lower for VLEP vs. LEP. • Approximately 75% of LEP ("speak English well") patients have trouble at least sometimes understanding people speaking to them in English. • Over half of LEP patients have difficulty understanding letters and information in English. • Nearly half of LEP and 15% of VLEP patients want to receive letters and instructions in both English and Spanish. • Home Internet access is approximately 80% for LEP and 55% for VLEP aged 20-59; 46% and 28%, respectively, for ages =60. • Ability to use email and the Internet significantly declines with age; lower among VLEP than LEP across age groups. • Significant VLEP-LEP and age group differences exist for communication modality preferences. Preference for modalities involving computer/Internet decrease with age and language proficiency within age group; while age differences persist, VLEP-LEP differences within age group are smaller for text messages, DVDs, and phone-based messages. **Discussion:** Limited English Proficient Latinos face many difficulties in ability to communicate with and to receive and understand health-related communications in a predominantly English-language setting, and ability to understand and act on health-related communications is compounded by the very low levels of education.

**Keywords:** LEP Patients; Latino Health; Learning Health Care Systems  
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### Mega-epidemiology and Methods

PS2-13:

#### Trends in Elective Labor Induction at 7 US Health Plans, 2001-2007

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**Background/Aims:** Elective induction of labor is controversial and has been linked to adverse pregnancy outcomes including higher rates of cesarean delivery. Many institutions have implemented measures to limit this practice. Our aim was to describe recent trends in the prevalence of elective induction.

**Methods:** A trend analysis was performed using data from 7 health plans participating in the Medication Exposure in Pregnancy Risk Evaluation Program, which includes linked health plan and state birth certificate data. Participating health plans represented 6 states within 3 US regions and a range of health care delivery models. We included deliveries from 2001 to 2007 and required that women be enrolled for the last trimester of pregnancy or longer. Induction was identified from birth certificate and health plan data and was defined as elective if neither source revealed an accepted indication for induction (e.g. diabetes, preeclampsia, and others). We compared induction prevalence across sites and over time, both unadjusted and also adjusted for health plan, gestational age, maternal age, and parity. Adjusted rates were estimated by marginal standardization using logistic regression.

**Results:** These analyses include 524,730 deliveries. Induction for any indication occurred in 27% (19,582/73,553) in 2001, rising to 32% (23,366/73,958) in 2005 and then declining to 29% (22,561/77,063) in 2007. Elective induction occurred in 10% (7,152/73,553) in 2001, rising to 13% in 2005 (9,924/73,958) and 2006 (9,937/78,357) and then declining slightly to 12% (8,877/77,063) in 2007. The lowest prevalence for elective induction at any site in any year was 7% (2,029/27,107) and the highest, 18% (454/2,480). At only one site did the prevalence of elective induction increase every year of the study period: from 10% to 15% (p<0.01 for trend). Adjusted results were similar. **Discussion:** The prevalence of elective induction was highest in 2005-2006 and slightly lower in 2007. While there was considerable variation in prevalence across sites, elective induction continued to increase at only one site after 2005. Our data suggest that overall, in this setting, elective induction may have plateaued or even begun to decline.

**Keywords:** Induction; Pregnancy; Mega-epidemiology and Methods  
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