expected extent for a medical condition and a pharmaceutical treatment, respectively; and the independent variables were types of medical condition or pharmaceutical treatment, types of information sources, frequency of past information search, health, extraversion, gender, and metropolitan statistical area. **RESULTS:** A total of 505 consumers yielded complete interviews, with a cooperation rate of 37.4%. On average, they were 57 years old, and 61% of them were female. Twenty percent of them had expectations of seeking information for a medical condition, and 14% for a pharmaceutical treatment. All regressions were significant (p<0.01). Health and gender were significant predictors for expected likelihood, and health and extraversion were significant predictors for expected extent (p<0.05). CONCLUSIONS: As perceived health status worsened, consumers were not only more likely to search for information, but also to a larger degree. Women were more likely to search for information, and those who were outgoing tended to perform information search to a larger

## PHP2

DIFFERENT STAKEHOLDER PERSPECTIVES ON PHARMACOGENOMIC TESTING Patel H, Ursan I, Zueger P, Pickard AS

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OBJECTIVES: Although the potential benefits of pharmacogenomic (PG) testing may be readily evident, there are numerous concerns creating barriers to its implementation. The purpose of our study was to compare various stakeholder attitudes and concerns toward PG testing as identified from the literature. A subaim was to understand issues with PG testing identified by underrepresented groups. **METHODS:** Using specific keywords, we conducted a systematic literature search of electronic databases including PubMed, IPA, CINAHL, and EMBASE. Articles that evaluated the attitudes and beliefs about PG testing were included. Concerns identified in the studies were categorized into themes (ancillary information-related, clinical, economical, educational, ethical/legal, medical mistrust, and operational), and summarized according to stakeholder group (patients, general public, providers, payers and others). RESULTS: Of 1483 citations identified in the initial search, 38 studies that presented 41 perspectives met the inclusion criteria, employing methods of eliciting perceptions via surveys, focus groups and interviews. Overall, there were 15 studies focusing on stavelys, focus groups and interviews. Overain, there were 13 studies focusing of providers, 9 on general public, 9 on patients, and 4 on payers, and 4 on other stakeholder perspectives. Studies of the general public most commonly identified issues related to medical mistrust (n=5), education (n=5) and operations (n=5). The most prevalent issues from the patient perspective included ethical/legal (n=6) and economical (n=5). Clinical (n=11) and educational (n=11) issues related to PG testing were recognized as frequent among the providers. Among the payer perspective, operational (n=4) and clinical (n=3) issues were prominent. In the underrepresented groups, concerns of medical mistrust and economical issues were notably higher compared to other groups. CONCLUSIONS: While the number of studies, assessing attitudes and concerns of various stakeholders, has increased over the last five years, the fundamental issues remain unchanged. Improved understanding of such issues may help strengthen the uptake of pharmacogenomic testing in clinical practice and lead to better health outcomes.

PUBLIC ENGAGMENT MECHANISMS IN HEALTH TECHNOLOGY ASSESSMENT (HTA): AN EARLY ASSESSMENT OF CANADA'S NATIONAL HTA PUBLIC ENGAGEMENT INITIATIVES

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OBJECTIVES: To address questions about the importance of public (patients, patient groups, etc) engagement in HTA processes with the objective to - 1) explore ideas regarding the use of public engagement in decision making processes (specifically coverage decisions), and 2) contextualise some of the main arguments found by assessing the Canadian Agency for Drugs and Technologies in Health's (CADTH) current public engagement mechanisms for its Common Drug Review (CDR). **METHODS:** A literature search was performed to identify key theoretical arguments for and against public engagement in HTA processes. The search was mainly focused on sources from Canada and the UK. A review of CADTH's website was conducted for technology appraisals completed by the CDR process since the start of its public engagement initiatives (to mid-August 2012). RESULTS: Key arguments for public engagement in decision making include: transparency, accountability, equity, and creating a patient-centric health system. With the CDR, the percentage of appraisals conducted for coverage decisions that included public (patient group) input was 48%. The lack of engagement from patient groups on half of the appraisals highlights some of the key challenges of public engagement (e.g., lack of awareness, lack of budget). Furthermore, the documents reviewed showed that some indications received more responses than others (e.g., epilepsy, schizophrenia). This may potentially result in some underfunded patient groups feeling disempowered, which is a risk of engagement. **CONCLUSIONS**: The findings of the study support initiatives that encourage the engagement of the public so that decision makers can better incorporate the values held by citizens. However, the relative value of doing so will vary. To ensure that public engagement in HTA is appropriate and fair, Canada and other jurisdictions must have political will, dedicated resources, and the motivation to facilitate educational activities that support active engagement from all types of public.

# рнр4

PRICE ELASTICITY AND MEDICATION USE: COST-SHARING IN MULTIPLE CHRONIC CONDITIONS

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OBJECTIVES: To examine the impact of cost-sharing on the demand for medication across several classes of prescription medications indicated to treat chronic conditions. METHODS: Data from the 2005-2009 MarketScan Commercial Claims and Encounters databases were used to evaluate prescription fills across 10 categories of medications. The date of first fill served as the index date for each subject and patterns of use were analyzed for at least seven continuous calendar quarters within the study window. Cost sharing, expressed as a price index for each medication class, was the main explanatory variable to examine price elasticity of demand. This index was based on the average cost-sharing amount per prescription and was weighted using the national proportion of generic and brand medication within each drug category. Negative binomial generalized estimating equations models were constructed to examine medication fills; standard demographic variables were used to control for confounding. RESULTS: Prescription fills per enrollee ranged from 0.01 (smoking deterrents) to 0.23 (Statins) and the average spending for medications showed considerable variability: those taking thyroid hormone reported an average expenditure of \$31.29 while those on antiplatelets had an average expenditure of \$330.38. Additionally, the share of generic drug use within each category ranged from 4.7% (smoking deterrents) to 88.4% (NSAIDs/Opioids). Estimates from the negative binomial models revealed that the price elasticity of demand ranged from -0.015 to -0.157 within the 10 categories of medications (p<0.05 for 9 of 10 categories). Demand for smoking deterrents proved to be the most price elastic of drug categories (-0.157), while NSAIDs/Opioids were observed to be relatively price inelastic (-0.015). **CONCLUSIONS:** The price elasticity of demand varied considerably by medication category, suggesting that the influence of cost-sharing on medication use may be related to characteristics inherent to each medication class or underlying condition.

AN ANALYSIS OF THE RELATIONSHIP BETWEEN GROWTH IN PATIENT COST SHARING DUE TO BENEFIT DESIGN SHIFTS AND DIAGNOSTIC PRICING AND SPENDING

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**OBJECTIVES:** Consumers are shouldering an increasing percentage of health care expenditures through cost-sharing mechanisms embedded in benefit design structures. As a result, many patients are paying out-of-pocket for some or all of the costs associated with diagnostic testing. Traditionally, diagnostic companies have focused on demonstrating value to payers with the goal of achieving adequate pricing and reimbursement. Though this approach will remain necessary, patients are an increasingly critical stakeholder in determining whether a diagnostic's value supports the resulting out-of-pocket costs. This study examined how out-of-pocket expenditures by individuals, national health expenditures (NHE) on diagnostics, and the price index for diagnostics grew between 2005 and 2011. **METHODS:** A systematic review of published literature related to health care expenditure, health insurance coverage, diagnostic pricing, and benefit design was performed. In follow-up, data from the Centers for Disease Control and Prevention, Bureau of Labor Statistics, Employer Benefits Health Survey, and diagnostic industry reports were reviewed to examine growth rates over the study period. Basic statistical methods were employed to determine how average annual growth rates within each segment relate to other variables being considered. RESULTS: The proportion of individuals in America with high-deductible health plans has increased 475% in the last six years. This correlates to over 25 million Americans responsible for at least \$2000 in deductible costs in addition to coinsurance and co-pays. During this period, pricing of diagnostics only rose at an average annual rate of 1.0%. Overall spending on health care increased while diagnostics expenditure remained consistent at 6% of NHE. CONCLUSIONS: As health care continues to transform, the demand for high quality diagnostics will continue to grow. However, the increasing financial burden borne by individuals will lead to increased price sensitivity. Novel technologies will need to demonstrate value and clinical utility not only to payers, but to patients, to achieve pricing and reimbursement.

RACIAL DISPARITY IN DURATION OF PATIENTS' VISITS TO THE EMERGENCY DEPARTMENT: TEACHING VERSUS NON-TEACHING HOSPITALS

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OBJECTIVES: Racial disparity in duration of patients' visits to emergency departments (EDs) have not been well documented. This study explores the racial disparity in duration of routine visits to EDs at teaching and non-teaching hospitals. METHODS: Retrospective data analyses and multivariate regression analyses were performed to investigate the racial disparity in duration of routine ED visits at teaching and non-teaching hospitals. Duration for each visit was computed by taking the difference between admission and discharge times. The Healthcare Cost and Utilization Project (HCUP) State Emergency Department Databases (SEDD) were used in the analyses. The data include 4.3 million routine ED visits encountered in Arizona, Massachusetts, and Utah during 2008. SEDD provide detailed diagnoses, procedures, total charges, patient demographics, and admission and discharge time for each visit. We linked SEDD files with American Hospital Association Annual Survey Database, Trauma Information Exchange Program Database and Area Resource File to obtain hospital and area level characteristics. **RESULTS:** The mean duration for a routine ED visit was 238