...when feeling worse) and UNA (‘forget to take medicine’ and ‘careless about taking medicine’) scores ranging from 0=adherence to 2=high non-adherence. Acutely ill patients had greater odds of reporting lower adherence than those with chronic disease. Further, the odds of reporting lower adherence were significantly greater (p<0.05) for those with mental health conditions compared to those with physical health conditions. Conclusions: The study identified a number of factors associated with non-adherence to oral medications, including patient-related factors such as age, sex, education, and income, as well as medication-related factors such as dosage regimen and side effects. The findings highlight the importance of understanding the complex interplay of these factors in order to develop effective interventions to improve adherence and reduce costs. Other research has shown that improving adherence can lead to better health outcomes and lower healthcare costs. For example, one study found that improving adherence to antiretroviral therapy for HIV patients resulted in a 50% reduction in healthcare costs. Overall, the findings suggest that interventions targeting patient education, medication management, and support can help improve adherence and reduce costs.
coverage gap period, a considerable proportion of beneficiaries stopped taking medications in both the groups and the proportion of beneficiaries who declared adherence (MPR > 0.80) also dropped for both the groups. CONCLUSIONS: Medication Part D beneficiaries face significant barriers to adherence, especially those reaching the coverage gap. Interventions to improve adherence should target all beneficiaries, particularly those using multiple medications.

PIH35

UTILIZATION AND ADHERENCE ONE-YEAR POST CDHP IMPLEMENTATION

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OBJECTIVES: To establish any impact of the high deductible Consumer Directed Health Plans (CDHP) on the overall utilization and adherence outcomes for some key therapeutic classes one year post implementation. METHODS: CVS Caremark pharmacy claims data (7/1/2008 – 7/1/2011) was analyzed. This study was designed as a retrospective pre-post cohort study. For the clients who implemented CDHP in 2010, the observed adherence was compared to the pre-CDHP cohort in 2009. RESULTS: The total of 12,689 surveys were obtained from the Harris Interactive Chronic Illness Panel. 53% of the respondents were Caucasian. A full 84% of respondents preferred prescription-medication information about long-term health outcomes. Preferences for long-term outcome information were significantly associated (p < 0.01) in multivariate models with older age, higher income, having drug insurance benefits, higher perceived affordability, higher perceived necessity, and lower present-time orientation. For example, persons with high perceived medication affordability were 1.9 times more likely to prefer information about long-term health outcomes compared to those with low perceived affordability. Persons with a high perceived need for medications were 1.6 times more likely to prefer information about long-term health outcomes compared to those with low perceived need. Persons with low present orientation twice as likely to prefer information about long-term health outcomes compared to those high in present orientation. CONCLUSIONS: Information about the long-term effects of prescription medications was the most preferred information expressed by 12,689 adults with chronic disease and was influenced significantly by medication beliefs and present orientation. Providers, manufacturers, and payers should acknowledge these temporal preferences when developing patient-education materials about prescription medications.

PIH38

THE RELATIVE INFLUENCE OF PERCEIVED NEED FOR MEDICATIONS VERSUS PERCEIVED MEDICATION CONCERNS IN DETERMINING MEDICATION ADHERENCE: NARRATIVE SYSTEMATIC REVIEW AND META-ANALYSIS

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OBJECTIVES: The Beliefs about Medication Questionnaire (BMQ) is a measure of patients’ medication beliefs (perceived need for medications and perceived medication concerns), and it has been used widely in investigations of medication adherence. To date, there has been little assessment of the relative importance of necessity vs. concerns in determining medication adherence. Using a systematic literature review and subsequent meta-analysis, this study evaluates the impact of BMQ necessity, concerns, and necessity-concerns differential as a predictor of medication adherence. METHODS: Articles were identified through searches conducted on MEDLINE, CINAHL, Psych Info, EMBASE, International Pharmaceutical Abstracts, PubMed, and review of reference citations. Methodological variables, effect sizes of associations, diseases, and measures of adherence were abstracted from each eligible article. Studies were categorized by BMQ measures (necessity, concerns, and the differential), statistical significance (bivariate or multivariate associations were reported between adherence and perceived concerns (57.4%), perceived necessity (75.6%), and the differential (88.9%). Two-thirds of the 33 multivariate analyses demonstrated higher effect sizes (odds ratios or standardized regression coefficients) between necessity and adherence than between concern and adherence. CONCLUSIONS: There was a wide variation between adherence and disease and adherence metrics. For example, necessity was significantly associated with adherence in 100% of diabetes studies but 0% of renal studies. Self-reported adherence metrics and pill counts had the lowest and highest rates, respectively, compared with BMQ. Concerns were associated with adherence for medications is a more potent predictor of adherence than medication concerns. Perceived need for medication is a mutable patient belief. Adherence interventions may improve their effectiveness if perceived need for medications became a central theoretical and interventional focus.

PIH39

ELIGITIZING PREFERENCES TO THE EQ-5D-5L HEALTH STATES: DISCRETE CHOICE EXPERIMENT OR MULTIPROFILE CASE OF BEST-WORST SCALING

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OBJECTIVES: To compare the feasibility and reliability of the binary discrete choice experiment (DCE) and the multiprofile case of best-worst scaling (BWS) techniques in eliciting preferences for the EQ-5D-5L. METHODS: Forty-eight EQ-5D-5L health states were selected using a random number generator to create 24 pairs for DCE tasks and eight sets for BWS tasks (each task has three HS). Participants completed 12 pairs and eight sets in random order. Time to complete each task was recorded. Participants were asked to rank each HS using a visual analogue scale (VAS) and subsequently rank them for both BWS and DCE tasks. RESULTS: Across 77 studies, significant multivariate associations were reported between adherence and perceived concerns (57.4%), perceived necessity (75.6%), and the differential (88.9%). Two-thirds of the 33 multivariate analyses demonstrated higher effect sizes (odds ratios or standardized regression coefficients) between necessity and adherence than between concern and adherence. CONCLUSIONS: There was a wide variation between adherence and disease and adherence metrics. For example, necessity was significantly associated with adherence in 100% of diabetes studies but 0% of renal studies. Self-reported adherence metrics and pill counts had the lowest and highest rates, respectively, compared with BMQ. Concerns were associated with adherence for medications is a more potent predictor of adherence than medication concerns. Perceived need for medication is a mutable patient belief. Adherence interventions may improve their effectiveness if perceived need for medications became a central theoretical and interventional focus.

PIH37

TEMPORAL-OUTCOME FRAMEWORK PREFERENCES FOR PRESCRIPTION MEDICATION INFORMATION AMONG ADULTS WITH CHRONIC DISEASE IN THE UNITED STATES

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OBJECTIVES: This study aims to: identify patient preferences for prescription-medication information in terms of temporal framing (short- vs. long-term outcomes) and examine factors associated with such information preferences. METHODS: A total of 12,689 surveys were obtained from the Harris Interactive Chronic Illness Panel, a nationally-representative, Internet-based panel of adults with chronic disease. Respondents were asked to rank order their preferences for prescription-medication information in terms of information that underscored short- versus long-term health outcomes. Logistic regression was used to examine factors associated with the respondents’ first-declared temporal focus. RESULTS: Demographics and multi-item scales assessing medication beliefs (perceived necessity, perceived concerns, perceived affordability, patient knowledge) and present orientation as measured by the Concern for Future Consequences scale. Racial/ethnic age range was 40-90%, 52% of the respondents were Caucasian. A full 84% of respondents preferred prescription-medication information about long-term health outcomes. Preferences for long-term outcome information were significantly associated (p < 0.01) in multivariate models with older age, higher income, having drug insurance benefits, higher perceived affordability, higher perceived necessity, and lower present-time orientation. For example, persons with high perceived medication affordability were 1.9 times more likely to prefer information about long-term health outcomes compared to those with low perceived affordability. Persons with a high perceived need for medications were 1.6 times more likely to prefer information about long-term health outcomes compared to those with low perceived need. Persons with low present orientation twice as likely to prefer information about long-term health outcomes compared to those high in present orientation. CONCLUSIONS: Information about the long-term effects of prescription medications was the most preferred information expressed by 12,689 adults with chronic disease and was influenced significantly by medication beliefs and present orientation. Providers, manufacturers, and payers should acknowledge these temporal preferences when developing patient-education materials about prescription medications.

PIH36

A DISCRETE CHOICE EXPERIMENT IN DIFFERENT HEALTH STATES: PATIENT PREFERENCES FOR PATIENT-CENTERED HEALTH CARE DELIVERY SYSTEMS

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OBJECTIVES: Patient-centered care is seen as a critical factor in a high-performance health care system. We considered a randomized decision-situation in which the available information is given by three hypothetical health states (information about outcome of care in diabetes, lung cancer diagnosis (status quo) and on the status quo of the respondent). METHODS: Within a discrete-choice experiment (DCE) 21 characteristics of a healthcare delivery system are being used to construct 4 DCEs based on thematic mapping (patient-involvement, point of care, personable relations) of which each DCE included six attributes with three specific levels. Furthermore respondents were randomly assigned and asked to make their decisions based on different information sets. RESULTS: For the N=3900 respondents the feature “out-of-pocket costs” was the important attribute across all 4 DCEs; the least important attribute was “DCE-3 coefficient, 0.6959; DCE-4 coefficient, 0.7926). Only “multidisciplinary care” in DCE-3 (Personnel) scored higher than cost with a coefficient of 0.7081. In DCE1 regarding patient-involvement, “trust and respect” (0.6187) and in DCE 2 addressing preferences at the point of care, “shared-decision making” (0.725) were of greatest importance. In DCE 4 the attribute “treatment guideline” (0.4682) was of high importance. The analysis showed that the relevance of the “out-of-pocket cost” changed when respondents were asked to consider their responses in the context of diabetes or lung cancer diagnosis (status quo: 0.6749; diabetes: 0.8114; lung cancer: 0.5043). Furthermore, the feature “trust and respect” (status quo: 0.7038; diabetes: 0.6555; lung cancer: 0.6369) was also less valuable when participants assumed a worse health state. CONCLUSIONS: The study aimed to close the gap between simplistic representation of patient preferences in health care systems and the complexity of actual patient decision-making processes by using the explanatory power of DCEs. Understanding how patients and stakeholders perceive and value different aspects of coordinated care is vital to the optimal design and evaluation of programs.