OBJECTIVES: To estimate the prevalence and losses in quality-adjusted life years (QALYs) associated with maternal health conditions (MHCs) among pregnant women in China. Using the National Survey of Children with Special Health Care Needs, we estimated that children with MHCs were less likely to reach age 5 (57.1%) and were more likely to have impaired health-related quality of life (HRQoL). This estimate is based on the assumption that QALYs lost due to MHCs are equivalent to the sum of QALYs lost due to other causes.

RESULTS: The prevalence of MHCs among pregnant women in China was estimated to be roughly 15.6%, with the most common conditions being hypertension, anemia, and depression. The estimated QALY losses were highest for depression, followed by anemia and hypertension.

CONCLUSIONS: The estimated QALY losses due to MHCs among pregnant women in China are substantial and highlight the urgent need for effective prevention and treatment strategies.

PHI38

STATUS OF MATERNAL DEPRESSION IN RELATION TO HEALTH-RELATED QUALITY OF LIFE FOR PREGNANT WOMEN IN CHINA: RESULTS FROM A HOSPITAL-BASED SURVEY

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OBJECTIVES: Maternal depression is hypothesized as a risk factor for compromised health-related quality of life (HRQoL) during pregnancy. The objective of our study was to compare HRQoL for pregnant women with or without depression and to provide evidence for the earlier prevalence of depression during pregnancy.

METHODS: Women at the third trimester of pregnancy were consecutively recruited from antenatal clinics of West China Second Hospital between October 2013 and February 2014 in Chengdu, China. Participants were surveyed using a questionnaire comprised of basic information of pregnant women, the Chinese version of the Edinburgh Postnatal Depression Scale (EPDS), and the Generic Medical Outcomes Study Short Form-36 (SF-36) on the same day. The responses were analyzed using multiple linear regression analysis.

RESULTS: A total of 324 pregnant women responded to our survey. Compared with women with depression during pregnancy (EPDS score ≥13), those without antepartum depression (EPDS score <13) had higher HRQoL scores. SF-36 dimension scores (mean ± SD) for the two groups were 59.69±18.72 vs 53.23±24.07 for physical function (PF); 43.10±24.66 vs 38.75±22.02 for role-physical (RP); 62.20 ± 63.24±16.53 for social function (SF); 55.49 ± 26.55 vs 75.37±25.80 for role-emotional (RE); and 45.42 ± 30.47 vs 59.52±17.28 for mental health (MH).

CONCLUSIONS: Lower maternal depression is associated with higher maternal HRQoL scores.

PHI39

UNDERSTANDING APPARENT HEALTH OUTCOME DISPARITIES BETWEEN ETHNIC GROUPS IN THE US

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OBJECTIVES: This study aims to understand ethnic group disparities in health outcomes by examining health-related quality of life (HRQoL), productivity loss, and resource use. METHODS: The data came from the 2013 US National Health and Wellness Survey, a representative cross-sectional general health survey (N=7,500). Respondents were self-reported into ethnic groups based on self-reported race, ethnic origin, and Hispanic origin.

RESULTS: White respondents had the highest MHS scores (Mean=49.41) and health utility scores (M=0.74) whereas Hispanic/Latino and Other had the lowest MHS scores (M=46.3, M=46.74, respectively) and health utility (M=0.71, M=0.70 scores all p<0.05). Asian respondents had the highest PCS scores (M=52.20) with Other having the lowest (M=49.19, p<0.05). Overall, White respondents had less work productivity loss (M=14.17%) and activity limitation (M=22.22%) than Hispanic/Latino (work productivity loss M=22.30% and activity impairment M=24.41%) or Other (work productivity loss M=19.06% and activity impairment M=26.20% all p<0.05). Relative to Hispanics, White respondents reported less ER visits (M=0.19 vs. M=0.34) and hospitalizations (M=0.11 vs. M=0.23 all p<0.05). Adjusted models lessened many of these differences, often likening White respondents to those of ethnic minority groups.

CONCLUSIONS: Initial analyses showed White respondents had higher HRQoL, less work and activity impairment, and lower resource use. However, after controlling for confounders, many of those differences were minimized indicating that factors other than ethnicity may more strongly influence health outcomes such as income.

PIH40

VALUATION OF CHILD HEALTH-RELATED QUALITY OF LIFE IN THE UNITED STATES

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OBJECTIVES: To estimate the prevalence and losses in quality-adjusted life years (QALYs) associated with childhood health conditions (CHCs) among US children. Using the National Survey of Children with Special Health Care Needs, we estimated that CHCs were associated with a “little trouble with breathing” had the highest prevalence (57.1%), but amounted to a loss of just 0.16 QALYs from the perspective of US adults. Though less prevalent, a “lot of behavioral and emotional problems” and “chronic pain/discomfort” each accounted for a loss of 1.86 and 3.43 QALYs. Among the 20 conditions, allergies and asthma were the most prevalent but were associated with the least burden. Muscular dystrophy and cerebral palsy were among the least prevalent and most burdensome.

CONCLUSIONS: In child health, chronic condition prevalence is negatively associated with the perspective of US adults. Both should be considered carefully when evaluating the appropriate role for public health prevention and interventions.

PIH41

THE VALUE ADULTS PLACE ON CHILD HEALTH AND FUNCTIONAL STATUS

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OBJECTIVES: by summarizing the value adults place on child health and functional status using the quality-adjusted life expectancy (QALE) life years.

METHODS: We used the 2013 US National Health and Wellness Survey, a representative cross-sectional general health survey (N=7500). Respondents, ages 18 and older, were recruited from a nationally representative panel between August 2012 and February 2013 and completed an online survey with a series of paired comparisons. Specifically, they chose between child health and functional status outcomes; these were described using the National Survey of Child Health and Functional Status. CHCs, a 14-item descriptive system of child health outcomes, ages 0 to 17 years. Using respondent choices regarding an unnamed 7- or 10-year-old child, generalized linear model analyses estimated the value of CHCs and functional status on a quality-adjusted life expectancy scale.

RESULTS: Across the domains of health and functional status, repeated or chronic physical pain, feeling anxious or depressed, and behavioral problems (such as the need for a friend) were most valued. Adults’ “willingness to pay” for adult respondents’ preference of other health problems to avoid problems along certain domains.

CONCLUSIONS: These findings may inform comparative effectiveness research, health technology assessments, clinical practice guidelines, and public reporting of health care outcomes and may inform the value of child health and functional status of children. Improved measurement of public priorities can provide national child health by drawing attention to what adults value most and complementing conventional measures of public health surveillance.

PIH42

“WOULD YOU LIKE AN ALL-INCLUSIVE LUXURY HOLIDAY WITH FIRST CLASS FLIGHTS TO EGYPT WITH YOUR SOVALDI PRESCRIPTION”- INNOVATIVE COST-SAVING SOLUTIONS FOR US PAYERS

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OBJECTIVES: Gilead implemented a tiered global pricing strategy for SOVALDI where the price reflects a country’s ability to pay; a 12-week treatment course in the US costs $84,000 versus $840 in Egypt, and Brazil. SOVALDI has generated some strong推论 as it eyes priority 3 classification in the US. These findings may inform comparative effectiveness research, health technology assessments, clinical practice guidelines, and public reporting of health care outcomes and may inform the value of child health and functional status of children. Improved measurement of public priorities can provide national child health by drawing attention to what adults value most and complementing conventional measures of public health surveillance.

PIH43

ANALYSIS OF SURVEY DATA FOR LEARNING EFFECTIVENESS EVALUATION OF A TALENT MANAGEMENT PROGRAM FOR DAIRIES AND FEEDLOTS

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OBJECTIVES: Training courses are provided for human capital services that strive to make professional talent management a competitive advantage for producers in the US livestock market. This analysis measures the effectiveness of the training program for producers to learn about ROI, identifies potential areas for future training, and informs future training and necessary program adjustments. METHODS: Utilizing a survey data collection instrument and analytics software application that includes program specific benchmarks, course participants were invited to complete a Follow Up survey > 2 months post completion. Survey items included 12 multiple choice surveys including: 124 Follow up surveys and 19 Manager surveys were analyzed. For Likert-type questions (1 – 5 response scale) a percent favorable, also known as a top two box, was used to display response data. For percentage based questions (0% - 100%) a simple average correlation was used to dis
play response data. Analysis by question, category and demographic descriptor was performed. Results: Response rates of learners were lower compared to the baseline study within 4 weeks. Learners reported a notable increase in improving animal health and production as a result of the training. Most learners (>90%) view the program as a worthwhile investment in their career. Significantly less managers feel the same way (60.3%). The most common reason for dropping out of the training is 1.7 times the top 25% benchmark. Surprisingly, those with greater than 10 years tenure find the program to be just as worthwhile or more compared to the other tenure groups and the largest number of employers saw the greatest Job impact from the training. Conclusions: The training provides much needed resources for the industry since most learners found it a worthwhile investment and the ROI calculation is high. This analysis allows for data driven decisions to be made for program adjustment and learner selection.

PIH44 TRENDS IN PATIENT CENTERED RESEARCH IN THE PUBLISHED LITERATURE
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Objectives: In a previous study we found a steep increase in the use of the term “patient-centered” in the published literature from <1 articles in the 1960s to >3000 in the 2010s. We also noted an increase in the proportion of articles in each decade reporting original research (17 vs 90%). The objective of this study was to further examine the subset of articles reporting original research. Methods: We searched EMBASE for articles written in English between 1950-2013 with ‘patient-centered’ in the title or abstract. We selected a random sample of 10 articles within each decade and coded data from the title and abstract on the focus of the article (healthcare research, or teaching). We selected those focused on research and extracted additional data on the study design, data collection methods, number of cases, comparator group, and whether any comment was made on patient involvement and/or patient feedback. We also saw if they used PSIs and other symptom specific questionnaires. We also noted if they used more sophisticated study designs (>75%). The majority of studies in all decades employed descriptive statistics, however multivariate methods were used in 25% of studies in the 2010s. The use of a comparator group (16 vs 50%) and the average number of subjects (38 vs 667) also increased steadily over time. Conclusions: In addition to the increase in original research publications with “patient-centered” in the title or abstract over the last 50 years, we observed an increase in scientific and methodological rigor among these original research articles. These findings are consistent with the rise in personalized-medicine in the healthcare industry today, as well as the upsurge in the use of patient-reported outcome data that characterizes clinical research today.

PIH45 CAN A WEB-BASED TOOL TO FACILITATE COMMUNICATION BETWEEN PATIENT AND HEALTHCARE PROVIDERS IMPROVE PATIENT-REPORTED OUTCOMES?
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Objectives: Patients with barriers such as normal anxiety around illness, low assurance, and limited health literacy may have trouble communicating with their healthcare providers (HCP). HCPs are under increasing pressure to see more patients daily. Can a web-based training and worksheet help patients have improved outcomes, even in the face of these challenges? Methods: We conducted a post-implementation socio-cultural impact evaluation of a web-based tool. The tool was designed to produce an electronic, printable worksheet that contained the following: a detailed description of their primary complaint, including location, duration, and intensity according to Likert scale, correlation to activity, quality, and history. The worksheet also included a personal impact statement around daily activities of living and social activities, a therapy preferences statement and a statement of symptom management goals. Results: Of 25 patients, 14 responded to an outcomes survey: 10/14 (71%) of the respondents were female, with a range 30-72 years of age 6/14 (42.9%) consulted 5 or more HCPs and 9/14 (64.3%) had 5 or more healthcare visits for their healthcare issue prior to completing the worksheet 9/14 (64.3%) indicated they had some misconception with their HCP regarding medication. A majority of patients had received costly blood tests (81.8%), X-rays (72.7%), and MRI/CAT scans (63.6%) for their healthcare issue Most patients (78.6%) used the worksheet to have a discussion around a new treatment option they hadn’t previously discussed, and almost half 6/14 (42.9%) were able to get a diagnosis for a healthcare issue not previously diagnosed using the worksheet, Many 9/14 (64.3%) said the worksheet helped reduce office-visit related anxiety and helped them discuss symptom management [9/14 (57.2%)]. Conclusions: This simple web-based tool was useful in facilitating communication between patients and their HCPs, which led to diagnosis, receiving new treatments, and better symptom management, even in patients with long-standing healthcare issues, multiple visits, extensive testing, and multiple healthcare providers.

PIH46 PATIENT REPORTED OUTCOMES: ARE THEY RELEVANT TO U.S. PAYERS?
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Objectives: Current and future relevance of Patient Reported Outcomes (PROs) among U.S. payers making patient access decisions for pharmaceutical methods. Methods: Double blind, semi-structured telephone interviews with 12 U.S. payers, including: National and regional commercial payers, Accountable Care Organizations, Benefit Management companies, Veterans Affairs; and Department of Defense. Interviews included open-ended questioning and structured rating scales where 10=highest and 1=lowest possible score per concept. Results: Payers perceive PROs as the “Consequences of the disease and drug as assessed by the patient.” Average rating scale responses were

How relevant are PROs today? 3.7 in 5 years? 6.4
Would you like to see more PROs today? 6.1 in 5 years? 6.6
Should pharmaceutical companies invest more in PROs today? 5.6 in 5 years? 6.3
The sum of the 6 scales (min= 6, max = 60) ranged from 12 to 58, highlighting diversity across payers. PFO relevance was associated with the duration of enrollment and thus total amount of risk. DoC and ACOs reported the highest relevance for the prescription Commercial Health plans the lowest.

Education was consistently identified as a need to aid interpretation of PRO data to support patient access decisions. Conclusions: Payers’ reliance on PRO data will increase in the next five years, especially in symptomatic conditions with direct objective measures of success. PRO evidence is valued as a unique predictor of clinical and economic outcomes and as a key element of performance and quality ratings. Respondents showed interest in pharmaceutical companies’ increasing use of PROs in clinical trials, creation of real world evidence and supporting PRO education.

PIH47 FOR TWO COMPANIES THE FDA PRO GUIDANCE LEADS TO SIMILAR BUT DIFFERENT MEASURES: A CASE STUDY IN PSORIASIS
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Objectives: The objective of this research is to evaluate whether the 2009 FDA PRO Guidance leads to development of similar measures when followed by different researchers in the same disease. Psoriasis was selected as a case study, because two companies recently published patient-reported outcome measures to assess the severity of psoriasis-related symptoms: the Psoriasis Symptom Inventory (PSI) and the Psoriasis Symptom Diary (PSD). Methods: Full-length publications related to the measurement of the PSI and PSD were reviewed. A qualitative examination regarding the development process and key aspects pertinent to the PRO Guidance were extracted and compared: patient population, development steps (literature review, involvement of patients during item development), psychometric properties, content of final measure, recall period, response options, and scoring. The authors conducted a qualitative evaluation of the differences between the measures. Results: Five publications purporting the development of the measures were identified (PSI, n = 3; PSD, n = 2). Both measures focus on symptoms of moderate to severe psoriasis. Both measures were based on literature reviews, patient input, and expert opinion and had similar psychometric properties. Both measures have a 24-hour recall period. However, the measures consist of different numbers of disease-specific symptoms (PSI = 8; PSD = 6). The PSI consists of 8 items, all of which measure symptom severity. The PSD consists of 16 items (60% of symptoms = 8, severity of symptoms = 6, skin color = 1, reducing skin = 1). Additionally, the measures assess symptoms differently. The PSI uses a 5-point Likert scale, while the PSD uses an 11-point numeric rating scale; both measures equate higher scores with greater severity. Conclusions: This example demonstrates that when different experts develop patient-reported outcome measures to assess concepts and to align with the FDA PRO Guidance, the result is similar but not identical.

PIH48 SWITCHING IN PART D PRESRIPTION PLAN: PLAN SWITCHING VERSUS BRAND NAME DRUG SWITCHING
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Objectives: There is a dearth of evidence on factors influencing prescription plan switching versus switching from brand name drug to generic one. However, either of this decision may have a large impact on the healthcare system. Understanding how Medicare beneficiaries make these decisions may lead to better targeted interventions. The objective of the present study was to better understand the relative impacts of individual versus prescription plan level characteristics on both of these switching decisions. Methods: Medicare beneficiaries participated in the 2007 HRS prescription drug survey and 2009 HRS well-being survey. The sample included 1257 Medicare part D plan (stand-alone), HMO, fee-for-service or Advantage plans. The study sample includes 1298 individuals responded both years surveys. Random intercept multinomial logistic regression model was estimated. Results: Only 5% of sample members switched into different prescription plans in both 2007 and 2009, while about 24% individuals switched from brand name drugs to generic product to save prescription drug costs. An outcome variable of interest includes 4 categories: switched into different part D plan, switch from brand to generic drug, thought about switching but did not actually switch and didn’t do anything. The main covariates of interest include individual and plan level characteristics. Compared to “didn’t do anything” individuals were more likely to switch to different prescription plan (13%) or switched to generic drug from brand name (25%) if they were using higher number of prescription medications (<0.04). Individuals having plans with good customer service was 54% less likely to switch into different part-D plan. Compared to “didn’t do anything” individuals were 123% more likely to stay on the same plan being satisfied with the current plan if they experience “inertia” in the plan choice decision. Conclusions: Unobserved plan level characteristics matter in Part-D plan switching or drug switching decisions. Consumer inertia and plan’s customer service quality appear to be important factors influencing these switching decisions.

PIH49 A CONCEPTUAL FRAMEWORK FOR TRANSLATING PATIENT-REPORTED OUTCOMES FOR IMPLEMENTATION IN CLINICAL PRACTICE AND QUALITY IMPROVEMENT EFFORTS
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Objectives: As healthcare becomes more patient-centered, patient-reported outcomes (PROs) are used in different healthcare settings to help define a conceptual framework on the criteria for defining, implementing, and translating PROs into valid, reliable measures of performance. Methods: Conducted a structured literature review to identify influencers in the translation of PROs, issues that impact translation, and relationships between key variables. Results: Various influences on the translation of PROs include the translation process, tool development, dissemination, and implementation. A conceptual framework for translating PROs includes: enhancing patient satisfaction, improving patient outcomes, advancing healthcare practices, and improving healthcare value. The conceptual framework is composed of four components: understanding the patient’s perspective, measuring and monitoring the patient’s experience, translating the patient’s experience, and using the translated data for decision-making. This conceptual framework provides a comprehensive approach for translating PROs to improve clinical practice and quality improvement efforts.