

those included in the 1-year and change analyses completed the SF-36 within 30-days of their 1-year follow-up date. **RESULTS:** All patients contributed to the baseline analysis, and approximately 47% contributed to the 1-year and change analyses. At baseline, mean SF-6D values for all patients 50-59, 60-69, and 70-79 were 0.744 (SD=0.113), 0.743 (SD=0.105), and 0.722 (SD=0.101), respectively. At 1-year, E+P arm mean values were 0.754 (SD=0.117), 0.751 (SD=0.117), and 0.725 (SD=0.109), and placebo arm mean values were 0.751 (SD=0.122), 0.748 (SD=0.109), and 0.716 (SD=0.106), respectively. The E+P arm mean changes were -0.008 (SD=0.106), -0.004 (SD=0.096), and 0.000 (SD=0.093), and the placebo arm mean changes were 0.000 (SD=0.105), -0.003 (SD=0.095), and 0.011 (SD=0.093), respectively. **CONCLUSIONS:** We found minimally decreasing utilities among older age groups, and little variability between utilities by hormone replacement therapy use. These results may be particularly useful in future health economic evaluations of aging women given that they are derived from a large randomized sample, and age group specific. However, our findings may be limited by the homogeneity and representativeness of the E+P trial participants.

#### PIH34

##### THE IMPACT OF PRIVATE VERSUS PUBLIC INSURANCE ON HEALTH STATUS, WORK PRODUCTIVITY AND HEALTH CARE UTILIZATION FOR INDIVIDUALS RESIDING IN BRAZIL

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**OBJECTIVES:** National health care policy in Brazil is delivered via a two-tiered (public/private) system. Controversy exists since access to private insurance is skewed towards those with higher socioeconomic status, with 75% having incomes >5x the minimum wage, and 95% living in urban areas, mainly in the South and Southeast regions. Our objective was to assess the impact on health status, productivity and health care utilization due to insurance type among patients residing in different regions of Brazil. **METHODS:** Data were analyzed from the 2011 National Health and Wellness Survey, a nation-wide survey of adults in Brazil (N=12,000). Health status (SF-12v2), work productivity loss (WPAI), and health care resource use within a six-month time frame were compared across individuals in different insurance type strata (i.e., public/private). Data were also stratified according to Brazilian regions comprising the Mid-West, North, Northeast, South and Southeast, and the Federal District. Statistics included unpaired Student-t and Chi-square tests. ANOVA was used to test differences among regions of Brazil. **RESULTS:** A total 11,985 individuals comprised the public (N=6,074) and private (N=5,911) insurance assessment. Health care utilization was significantly lower among individuals with private insurance (physician consultations: 70.9% versus 86.0%; emergency room visits: 19.6% versus 25.7%; and hospitalizations: 8.9% versus 11.0%; all p<0.05). Overall work impairment (i.e., absenteeism and presenteeism combined) was also significantly lower in the private insurance group (difference=-2.8%, 95%CI=-1.3%-4.3%). Mental SF-12 score favored those with private insurance (difference=-0.058, 95%CI=-0.022-0.095), whereas physical SF-12 score favored those with the public insurance (difference=0.062, 95%CI=-0.035-0.088). Mid-West and Northern regions reported significantly poorer results than the Southern in almost all assessed parameters. **CONCLUSIONS:** Individuals covered with private insurance reported both lower health care utilization and work productivity loss. Variable results were reported for health status. Future research should examine the relationship in access/quality between public and private health care services and regions in Brazil.

#### PIH35

##### THE EXPERIENCE OF CARING FOR CHILDREN WITH HEMOPHILIA: CROSS-SECTIONAL STUDY OF CAREGIVERS IN THE UNITED STATES

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**OBJECTIVES:** Hemophilia is a bleeding disorder resulting from reduced or absent clotting factors. Inhibitors are alloantibodies that develop in response to replacement therapy with coagulation factor products. Patients are diagnosed at birth or shortly thereafter, and care is typically provided at home by parents and relatives (i.e., caregivers). Few formal studies have explored the experience of caregivers of children with hemophilia. This study aimed to quantify the overall burden of hemophilia on caregivers using a novel questionnaire. **METHODS:** A questionnaire with six domains (emotional stress, financial, sacrifice, medical management, child's pain, and transportation) and several visual analogue scales (VAS) was developed based upon the peer-reviewed literature and previous survey findings. Survey questions were validated with 3 caregivers. Previously developed opt-in research database was used for recruitment. IRB approval was obtained. **RESULTS:** A total of 310 caregivers (out of 681 invitees) completed the survey. Most respondents were mothers (88%) between 18-54 years. 89% had at least some college education. "Child's pain" was the most burdensome domain (mean score=3.54 out of 5), followed by "emotional stress" (2.79), "financial" (2.52), "transportation" (2.51), "sacrifice" (2.22) and "medical management" (2.05). Caregivers of inhibitor patients had higher total burden scores (96.17 vs. 78.65, p<0.0001) and burden VAS scores (5.57 vs. 3.44, p<0.0001) compared to those without inhibitors. Similar trends were seen for those diagnosed with hemophilia ≤2 years ago versus all else (86.36 vs. 79.83, p<0.04; burden VAS 4.89 vs. 3.47, p<0.0002). Other factors significantly impacting burden were: income ≤ \$50,000, taking ≥ 6 hours off work or having >1 bleed in past month (p<0.001). **CONCLUSIONS:** Hemophilia caregivers are largely impacted by the burden of their child's pain and emotional stress. Since caregivers of patients with inhibitors and those with ≤2 years since diagnosis

were more significantly burdened, potential programs can be developed to lessen their burden.

#### PIH36

##### PSYCHOMETRIC DEVELOPMENT OF A NEW PRO INSTRUMENT: THE FACE-Q SCALES FOR FACELIFT PATIENTS

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**OBJECTIVES:** Improved satisfaction with facial appearance is the primary desired outcome for patients undergoing facelift procedures. The FACE-Q is a new patient-reported outcome (PRO) instrument composed of scales to evaluate a range of outcomes (appearance concerns, quality of life, adverse effects) for patients undergoing any type of facial cosmetic surgery, minimally invasive cosmetic procedure or facial injectable. The objective of this study was to describe the development and psychometric properties of a set of FACE-Q scales relevant to measuring outcomes in facelift patients. **METHODS:** The FACE-Q was developed according to international guidelines for PRO instrument development. Scales relevant to facelift patients include five appearance scales (each with five items) covering the following facial areas: cheeks, lower face and jawline, nasolabial folds, area under the chin, and neck. In addition, an adverse effects checklist was developed to measure postoperative symptoms and complications. Data were collected in a larger study that included 225 facelift patients (all had surgery within the past 5 years) between June 2010 and June 2012 (response rate 78%). Rasch measurement theory (RMT) analyses was used to examine clinical meaning, thresholds for item responses, item fit, item locations, differential item functioning (DIF), standardized residuals, and person separation index (PSI). **RESULTS:** Participants were aged 36 to 77 years and 205 were female. The five appearance scales were found to be clinically meaningful, reliable, valid and responsive to clinical change. Specifically, RMT findings were as follows: no disordered thresholds; overall and individual item fit statistics (29/30 items -2.5/+2.5); no DIF by gender, age or ethnicity; PSI > 0.88 (0.88-0.90). Cronbach's alpha were all >0.94 (0.94-0.97). **CONCLUSIONS:** The FACE-Q scales for facelift patients are scientifically sound and clinically meaningful scales that may be used to measure the impact of facelift surgery on patient satisfaction.

#### PIH37

##### EXAMINATION OF UNIVERSITY STUDENTS' INTENTION TO UTILIZE EMERGENCY CONTRACEPTION USING THE THEORY OF PLANNED BEHAVIOR

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**OBJECTIVES:** To use the Theory of Planned Behavior (TPB) to predict university students' intention to use emergency contraception (EC). **METHODS:** A web-based survey was pretested and emailed to 2,000 university students in May 2010. The web-based survey measured the essential components of the Theory of Planned Behavior: intention, attitude (A), subjective norm (SN), and perceived behavioral control (PBC). The independent variables, A, SN, and PBC, were measured directly as well as by belief-based (indirect) measures. In addition, a measure of recent past behavior was evaluated. **RESULTS:** An overall usable response rate of 21.0% was obtained. In general, university students intended to use EC should the need occur, held favorable attitudes toward the use of EC, were somewhat influenced by social norms regarding EC use, and perceived themselves to have some control over EC utilization. For direct measures (TPB), A, SN, and PBC were significant predictors of intention to use EC. The direct model explained 49.2 percent of the variance in intention. Using indirect measures, A and SN were significant predictors of intention, but PBC was not; the indirect model accounted for 41.3% of the variance in intention to take EC. Attitude was the strongest TPB predictor for both models, followed by SN and PBC. The RPB variable did not significantly improve the TPB model. **CONCLUSIONS:** In summary, this study identified several key factors that partially explain why university students either intend or do not intend to use EC if needed. The TPB has utility in predicting utilization of EC in university students. Focusing particular attention on A, as well as SN and PBC, will allow researchers, educators, health care professionals, and legislators to develop strategies and educational programs to enable men and women to use EC responsibly.

#### PIH39

##### DEVELOPMENT AND CONTENT VALIDITY OF AN ENDOMETRIOSIS PAIN DAILY DIARY

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**OBJECTIVES:** To demonstrate how patient interviews reinforce a conceptual model of endometriosis symptoms and impact and help to identify concepts for inclusion in an improved Endometriosis Pain Daily Diary (EPDD). **METHODS:** Concept elicitation (CE) interviews were conducted with 17 surgically diagnosed endometriosis patients in the US to identify the PRO measurement concepts related to symptoms and impacts of endometriosis-related pain most important and relevant to patients' experience of endometriosis. Items were developed based on the Endometriosis Pain and Bleeding Diary (EPBD) and existing conceptual data. Cognitive interviews (CI) were conducted with 14 patients in the US to confirm comprehension of the draft items and ability to respond to the items as intended. **RESULTS:** Based on both spontaneous mentions and the frequency with which concepts were expressed during the CE interviews,