found to be statistically significant in test population($p<0.05$). The test group with patient education reported comparably improved medication adherence and QoL ($p<0.05$). **CONCLUSIONS:** QoL of south Indian patients is negatively affected due to DM. In the study we have observed that structured patient education has positively influenced the QoL. A significant correlation was found to exist among QoL, MA and therapeutic outcome in test group subjects.

PHS80

A VISION 'BOLT-ON' ITEM INCREASED THE SENSITIVITY OF EQ-5D IN A CROSS-SECTIONAL HEALTH SURVEY

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OBJECTIVES: Recently, a vision 'bolt-on' EQ-5D was developed and an experimental value set was estimated by Longworth and colleagues. This study aimed to compare the sensitivity of this 'bolt-on' and standard EQ-5D indices. **METHODS:** Cross-sectional data on the (3-level) vision 'bolt-on' EQ-5D was collected in face-to-face interviews with 500 individuals with and 336 individuals without visual impairment. Groups of individuals in different vision status were compared pair wise to examine the statistical power of and mean differences in various EQ-5D index scores, including the vision 'bolt-on' index (EQ-5D[vision]) and the standard index (EQ-5D[core]) developed in the vision 'bolt-on' valuation study, the MVH index (EQ-5D[UK]), and an index developed in Singapore (EQ-5D[SG]). **RESULTS:** The F-statistic value of EQ-5D[vision] was larger than that of all other EQ-5D indices in all known-groups comparisons with only one exception for EQ-5D[SG]. The mean difference in EQ-5D[vision] was larger than that in EQ-5D[core] for most of the paired known groups but smaller than that in EQ-5D[MVH] and EQ-5D[SG] for all paired known groups. Those mean differences in EQ-5D[MVH] and EQ-5D[SG] were not smaller than those in EQ-5D[vision] even after compressed to a commensurate scale range of the latter. **CONCLUSIONS:** Vision 'bolt-on' EQ-5D is more sensitive than standard EQ-5D in detecting differences in vision status. Using a vision 'bolt-on' EQ-5D in cost-effectiveness analysis of treatments targeting vision problems could generate more positive results. Future studies should assess the responsiveness of the vision 'bolt-on' and explore ways of building the value sets of 'bolt-on' systems upon those established, standard EQ-5D value sets.

PHS81

LEAN WORKFLOW CHANGES MAY CONTRIBUTE TO IMPROVED PRIMARY CARE PATIENT SATISFACTION

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OBJECTIVES: We examined the impact of Lean workflow changes on primary care patient satisfaction across 17 primary care locations in a large, multispecialty health care provider in Northern California. **METHODS:** The health care provider serves more than two-million patients across four California counties. It adopted Lean practices in an attempt to transform its primary care delivery. Patient satisfaction (Press-Ganey (PG) outpatient survey) and administrative data were used for this study. The PG survey covers several topics of the patient experience including Patient Access, Moving through the Visit, Care Provider, Nurse/Medical Assistant, and Handling of Personal Issues. A composite satisfaction score across these topics was used in primary analyses. Longitudinal data from 2010 to 2014 was used and includes data before and after the Lean implementation. Segmented regression analysis of interrupted time series was used to analyze physician-level PG scores over time, adjusting for physicians scheduled hours and seasonality. **RESULTS:** Across the organization, the composite patient satisfaction was decreasing (0.2%, $p<0.001$) per month prior to Lean implementation. This trend was reversed, with a statistically significant increase (0.2%, $p=0.02$) observed during the post-Lean period. Interestingly, the pre-Lean trend for patient access domain were decreasing at 0.3% per month ($p<0.001$) while a significant positive trend (0.8%, $p<0.001$) was observed during post-Lean period. Across all providers, an 8.3% increase (95% CI: [7.7%, 8.8%]) was projected in satisfaction scores with Lean implementation versus what would have happened if Lean was not implemented. The patient access domain was projected with an 11.5% (95% CI: [10.2%, 12.9%]) increase across all providers. **CONCLUSIONS:** We observed varying levels of improvement in composite patient satisfaction and its domains. There was a significant increase in satisfaction trends following the implementation of Lean. Primarily, the patient access domain appeared to drive the improved overall patient satisfaction.

PHS82

DESCRIPTION OF PATIENTS SATISFACTION OR DISSATISFACTION WITH REFERRAL AND COUNTER REFERRAL PROCESS

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OBJECTIVES: Many factors seem to influence patients' dissatisfaction with a referral system including; lack of timeliness of information from the referring specialists, inadequate information on referrals notes, lack of clarity of the content in referral notes. Breakdown in communication on the referral process can also lead to poor continuity of care, delayed diagnosis, increased litigation and decreased quality of care. Challenges in meeting patients' satisfaction with referral systems also include, physician time constraints, lack of clarity about reasons for referrals, patient self-referral limitations imposed by managed care and unclear follow up plans. The objective of this study was to estimate and describe the proportion of patients who were satisfied with the patients referral and counter referral process. **METHODS:** Quasi -experimental study was carried out in two sub- locations in rural Kenya where one hundred CHWs were trained on community-based-referral and counter-referral model and issued with referral tools. Each was assigned 25 households, instructed to regularly visit them in order to identify sick persons counsel and refer them to link hospitals. One hundred villages comprising 2209 households with a population of 11,000 people were covered where the referral model was implemented. Tally sheets were used to categorize referral recommendations. Satisfaction was defined as reported in survey response as, dissatisfied, neutral and satisfied. **RESULTS:** On patient satisfaction or dissatisfaction only two hundred and twenty eight respondents answered the questions of whom only 38% (37/117) reported that they were satisfied with the patient referral and counter referral process while 62% (80/117) were neutral. **CONCLUSIONS:** Two thirds of the respondents were undecided. They were neither satisfied nor dissatisfied with the referral process. This is a significant proportion which in the view of the authors, there is need for further investigation to establish factors that are likely to make patients remain neutral.

PHS83

TUBERCULOLIS SCREENING PREFERENCES OF HEALTHCARE WORKERS IN SOUTH AFRICA: A BEST-WORST SCALING STUDY TO ANALYZE VARIATION BY OCCUPATION

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OBJECTIVES: South Africa has one of the highest incidence rates of tuberculosis (TB) in the world. Healthcare workers (HCWs) are at a particularly high risk of developing active TB compared to the general population due to their occupational exposures. Using a Best-Worst Scaling (BWS) choice experiment, this study aimed to systematically quantify and compare the TB screening preferences of physicians, nurses and healthcare administrators working in the publicly funded healthcare system in South Africa. **METHODS:** Three focus groups and three key informant interviews were conducted to determine relevant attributes and attribute levels. Participants answered 12 choice tasks. Conditional logit modelling of BWS data allowed the estimation of coefficients for 15 attribute levels relative to a reference level allowing the determination of utility values **RESULTS:** One hundred-and-five HCWs completed the questionnaire, including 65 (62%) nurses, 21(20%) administrators, and 19 (18%) physicians. Analysis revealed that all HCWs preferred testing at their occupational health clinics compared to other clinics in the community. Administrators had the greatest preference for screening at no cost (Mean: 6.20, SE: 0.44). Physicians had the strongest preference to not wait for their testing (4.97, SE: 0.40) compared to all other attribute levels. Administrators and nurses had a strong preference to ensure the confidentiality of their tests (5.91, SE: 0.44, and 5.49, SE: 0.23, respectively), while this was less preferred for physicians (3.54, SE: 0.39). Nurses and physicians were indifferent to the HCW conducting the test, whereas administrators had a strong preference to be tested by a physician (5.58, SE: 0.43). **CONCLUSIONS:** There is considerable variation in TB screening preferences amongst physicians, nurses and healthcare administrators in South Africa. Attention to heterogeneity in preferences will optimize utilization of screening programs amongst this high-risk population.

PHS84

SHARED DECISION MAKING DOES NOT IMPROVE ADHERENCE TO PROSTATE CANCER SCREENING: EVIDENCE FROM THE HEALTH INFORMATION NATIONAL TREND SURVEY

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OBJECTIVES: Shared decision-making (SDM) is rapidly emerging as the preferred model to enhance patient-centered care particularly in oncology due to challenges surrounding diagnostic strategies. Due to the enormous uncertainty surrounding the effectiveness of prostate specific antigen (PSA) screening for prostate cancer (PCa), patients at risk for prostate cancer could greatly benefit from SDM. Our objective was to study the impact of knowledge regarding PSA and SDM on adherence to screening. **METHODS:** We used the 4th edition of the Health Information National Trends Survey (HINTS), a nationally-representative survey on the use of cancer-related information among Americans conducted by the National Cancer Institute (NCI). The dependent variable was whether the respondent ever underwent PSA testing in his lifetime. Logistic regression was used to study the impact of knowledge regarding the PSA test and SDM on respondents undergoing the test. **RESULTS:** Majority of the respondents were White, with college or higher education, were married, within age group 51-65 years and had health insurance. Knowledge regarding the PSA and shared decision making greatly increased the chances of undergoing the test in all three cycles (OR: 5.00, 2.71, 2.20). On the other hand, shared decision making, after controlling effects of other covariates, did not show any significant impact on respondents undergoing the PSA test (OR: 0.97, 1.05, 1.0). **CONCLUSIONS:** Our study demonstrated that while knowledge regarding PSA testing increased the likelihood of patients undergoing the test, SDM had no effect. In light of the recent recommendations advising against screening for PCa, it would seem that fewer patients undergoing screening might be explained by clinicians discussing the trade-offs between risks and benefits of screening with patients, enabling them to make the best decisions regarding their care.

PHS85

HEALTH RELATED QUALITY OF LIFE AND HEALTH CARE RESOURCE USE BURDEN IN MIGRAINE WITH AND WITHOUT NAUSEA

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OBJECTIVES: To estimate the burden of nausea and/or vomiting (N/V) on sleep, depressive symptoms and health care resource use (HRU) in migraine patients. **METHODS:** Study data came from cross sectional, internet-based 2013 US National Health and Wellness Survey (NHWS). Survey participants self-reported their migraine frequency with or without N/V along with demographics, HRU in the previous 6 months (physician, emergency and hospital visits), sleep problems, and depressive symptoms. Sleep and depression outcomes were compared between