have covered various indications, mostly commonly psychiatric disorders (7 letters), pain (5 letters), and cancer (6 letters). No DMAC letter pertained to FADAMA Section 9001.

CONCLUSIONS: The FDA continues to face economic competition and express concerns about certain inappropriate practices, particularly unsupported work productivity claims and hidden clinical claims (i.e., about effectiveness or safety) embedded in health economic information. More guidance from the Agency would help clarify what level of substantiation is required for health economic promotions.

PR2
THE IMPACT OF MINIMALLY INVASIVE SURGICAL TECHNOLOGY ON THE COSTS OF EMPLOYEE ABSENTEEISM

Epstein AJ, Groeneveld PW, Hayar M, Yang F, Polsky D
Mount Sinai School of Medicine, New York, NY, USA

OBJECTIVES: To assess the impact of six minimally invasive surgical technologies on worker absenteeism. METHODS: Using national health insurance claims data (Thomson-Reuters MarketScan Commercial Database) and matched data on workplace demographics and employee characteristics, we identified 37,495 patients aged 18-64 with employer-sponsored health insurance who underwent either conventional or minimally invasive surgery during 2001-2008 for ischemic heart disease (n=18,184), uterine fibroids (n=12,795), prostate cancer (n=3,466), peripheral vascular disease (n=1,856), aortic aneurysms (n=949). Our primary endpoint was total days absent from work, measured as the patient-specific difference between days absent during the baseline period (380 days to 352 days from procedure date) and the peripartum and post-operative periods (14 days to 352 days) to account for individual-spaced illness trends and propensity to use sick and medical care indicated adequate convergent validity. RESULTS: Minimally invasive surgery was associated with fewer unadjusted days of workplace absence for ischemic heart disease (-26.0 days), aortic aneurysms (-20.2 days), and ischemic heart disease (-26.0 days) (p<0.001 for all comparisons). CONCLUSIONS: Minimally invasive surgical procedures reduce worker absenteeism by substantial amounts.

PR3
QUALITATIVE ASSESSMENT OF HEALTH-RELATED PRODUCTIVITY INSTRUMENTS

Tindal NL1, Newton PC1, Kelton CM1, Haas S1, Fuldeere M3
1University of Cincinnati, Cincinnati, OH, USA
2University of Cincinnati College of Business, Cincinnati, OH, USA
3Abbot Laboratories, Abbott Park, IL, USA

OBJECTIVE: Assessment of lost productivity through health-related productivity instruments (HRPIs) is useful for pharmacoeconomic research. The aim of this study was to conduct a systematic review and critique of HRPIs. METHODS: Through a comprehensive search in the PubMed database using the keywords “health-related productivity,” “absenteeism,” and “presenteeism,” the following general characteristics were identified: American Productivity Audit and Work Health Questionnaire (APA&WHQ). Health-Related Productivity Questionnaire-Diary (HRPQ-D), Work Productivity and Activity Impairment (WPI-AI), Work Productivity and Activity Impairment Short Inventory (WPI-SI), Worker Health and Productivity Database, WPSI, and Work Productivity Index (WPI). All HRPIs were graded on five major and three minor assessment criteria. Major criteria included: (1) lost productivity could be attributed to a specific health problem; (2) presentation was measured; (3) absenteeism was measured; (4) productivity was measured for both those in and out of the labor force. Minor criteria included: (1) how perceived impairment was measured; (2) the minimum recall period required; and (3) whether population estimates could be obtained. RESULTS: All of the HRPIs except HRPQ-D failed to provide information on at least one major criterion. The SPS, WLPQ, WPI-AI and WPI-SI lacked information on 1 major criterion, APA&WHI, HLPQ and HFPQ on 2 major criteria, EWPS on 3 major criteria and HWPQ on 4 major criteria. The HRPQ-D, SPS, WLPQ, WPI-AI and WPI-SI satisfied all or at least 1 major criterion but lacked 1 minor criterion. The common major criterion frequently lacking among the SPS, WLPQ, WPI-AI and WPSI was either household-related productivity loss or valuation. CONCLUSIONS: Current HRPIs lack comprehensive estimation of lost productivity. There is an opportunity to develop stronger survey instruments.

PR4
BREAST CANCER MORTALITY RATES BY GEOGRAPHIC REGION, YEARS OF POTENTIAL LIFE LOST, AND VALUE OF PRODUCTIVITY LOSSES AMONG WOMEN AGED 20-49 YEARS IN THE UNITED STATES, 1970–2008

Fawziya DU1, Guy GP, Rim SH1, Hall J, Thomas CC, Fairley TL, Rodriguez J, White A
1Cincinnati Medical Center, Cincinnati, OH, USA

OBJECTIVES: There are no studies in the United States examining the trends in mortality rates, years of potential life lost (YPLL), and value of productivity losses due to breast cancer (BC) among women aged 20-49 years. We examined the trends in BC mortality rates by geographic region, estimated YPLL and value of productivity losses by race/ethnicity, and pharmacoeconomic outcomes.

METHODS: National mortality rates from 1970-2008 were used to calculate age-adjusted mortality rates and rate ratios (RRs). Joinpoint regression analysis was used to assess changes in trends over time. The YPLL were calculated to quantify the burden of premature mortality. The value of lost lifetime productive earnings of young women who died of BC in 2008 was used to quantify the expected future value of lost productivity due to premature mortality.

RESULTS: From 1970 through 2008 the age-adjusted mortality rate from BC among white young women was 11.45/100,000 and 17.9/100,000 among blacks. Compared with white women, blacks had substantially higher age-adjusted breast cancer mortality rates. BC mortality rates vary by geographic region. The decline in BC mortality rates among blacks has been small (0.68% per year) compared with whites (2.02% per year). During the same period, the total number of deaths associated with BC in young women aged 20-49 was 225,886, with 121,751 attributed to white BC.

CONCLUSIONS: Although blacks have substantially higher age-adjusted BC mortality rates, there has been very little overall change in death rates over time compared to other races. Our results may implicate the need for focused attention to racial disparities in BC diagnosis, treatment, and survivorship efforts among specific populations.