OBJECTIVES: 1) To describe the prescription patterns of patients on Transdermal Fentanyl (TDF) (Duragesic(r)) and diagnosed with low back pain (LBP) and/or osteoarthritis (OA); 2) To describe differences in physical and mental health changes for patients on TDF according to duration or intensity of therapy using the Veterans SF-36 among patients diagnosed with low back pain and/or osteoarthritis.

Research Design: Retrospective cross-sectional design using administrative and clinical cohort data.

METHODOLOGY: This study evaluates the health related quality of life (HRQoL) of LBP and OA patients on TDF using the Veterans SF-36, and describes differences in physical and mental health changes also using the Veterans SF-36 in relation to three diagnostic groups (OA only, LBP only and OA/LBP) and intensity of therapy (1 to 6 months of therapy). This report is based on three unique databases from the Veterans Health Administration (VHA): (1) the 1999 Large National Health Survey of Veteran Enrollees (which includes patients' health-related quality of life (HRQoL), as measured by the Veterans SF-36), (2) VA national administrative data (which include ICD-9-CM diagnostic codes), and (3) pharmacy data from the VA National Pharmacy Benefits Management Program (PBM). The Veterans SF-36 includes two items that ask the subject about their perception of physical changes in health and separately about emotional changes in health over the past year. Patients respond to a 5 point ordinal scale that ranges from "much better" to "much worse." Results are extrapolated based upon linear trend analysis beyond the 6 months of actual therapy.

FINDINGS: For those on continuous therapy of 1 to 6 months duration, multivariate models showed that TDF was associated with a patient perceived improvement in the physical change item of 0.09/month (p<0.0004), reaching a one-half standard deviation improvement (moderate effect size) in 5 months, and a 0.05 (p =0.049)/month improvement in the emotional change item, reaching one-half standard deviation in 10 months (also a moderate effect size), compared to a year ago. For the physical and mental summaries which are health perceptions over one month, results also suggest that each extra month on TDF was associated with 0.72 (p=.02) of one point improvement in mental summary scores (MCS) or 5.04 points over 7 months (a moderate effect). There was no significant effect on physical summary scores (PCS). Results provide evidence for responsiveness to clinically relevant change of the physical and emotional change items in the Veterans SF-36.

Impact/Significance: Results indicate the clinical meaningfulness of gauging the patient perceptions of physical and mental health changes. Future evaluations of the effectiveness of pain medications can consider the addition of the Veterans SF-36 change items.