**TITLE:** Total Joint Arthroplasty for International Patients at a Tertiary Military Medical Center

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**INTRODUCTION:**

As the healthcare delivery system in the United States changes, there has been increased specialization through “centers of excellence” within a various regions of the United States.  However, there are few centers, in civilian or military medicine, that provide total joint arthroplasties for the underserved Pacific Islanders and other international patients. The purpose of this study is to compare the complications associated with total joint arthroplasty for patients from the United States versus outlying Pacific Islanders.

**METHODS:**

A retrospective review of all patients receiving total joint arthroplasties at a single medical institution were reviewed from 2015-2017. Demographic data, place of residence, pre-operative nutrition parameters, MRSA screening results, Hemoglobin A1c, length of hospital stay, disposition at time of discharge, and last date of follow-up either at the treating hospital or (Veteran’s Administration) VA Clinic.

**RESULTS:**

After meeting inclusion criteria 138 consecutive patients were reviewed for 30-day complications. Fifty-four patients were international, seventy from local Oahu, Hawaii and fourteen patients from neighboring Hawaiian Islands. There were no significant differences in complications between the groups. Length of stay was not signifcantly longer in the international patients versus local Oahu. A significant risk factor for short term complications was American Society of Anesthesiologists, ASA 3 vs. ASA 1&2 (13.5% vs. 2.6%, p=0.036). There were no findings in our population to support inferior outcomes in those who have immediate access to care compared to patients traveling from the outer Pacific Islands. No patient sustained a short term complication after a patient returned to their island/country of origin.

**DISCUSSION/CONCLUSION:**

The results of this study will help to guide clinical decision making and effective resource management for patients seeking total joint arthroplasty traveling from a significant distance. Expansion of this preliminary data set will provide further insight into potentially modifiable risk factors specific to travel.