Monitoring of free flaps. Their efficacy, recorded data trend, and device characteristics will be compared.

RESULTS: During the study period, there were 696 cases with a primary non-plastic surgeon who required a consulting reconstructive surgeon. There were 993 primary plastic surgery cases, and 21,146 nonconsult cases performed by other surgical specialties that were identified for comparison. The specialties most commonly requesting reconstructive assistance were orthopedic surgery (n = 139), neurosurgery (n = 124), breast/surgical oncology (n = 86), and cardiothoracic surgery (n = 71). Average net revenue per case was greatest for the consult group, $94,557 per case, versus $73,824 per case for primary plastic surgery cases and $60,758 per case for the non-consult comparison group. Average CM for plastic surgery consult cases was $39,326. This CM was significantly greater when compared to primary plastic surgery cases ($25,779; P < 0.05), and to all other nonconsult cases ($24,789; P < 0.05).

DISCUSSION: Plastic surgeons provide frequent and valuable operative assistance to other surgical services. Cases that require plastic consultation generate more revenue than those performed by either the plastic surgery department alone or any other department. Furthermore, these cases demonstrate a significantly higher CM, which is a measure of overall profit generation for the hospital. This financial impact is poorly captured by current hospital tracking systems, which categorize only by primary surgical specialty. The specific skill set of plastic surgeons is thus an undervalued resource for both patient care and hospital financial well-being. By understanding the economic contribution of reconstructive surgery at the institutional level, resource allocation can be better tailored to support future growth of these departments.

Comparison Between Near-infrared Spectroscopy and Laser Doppler Flowmetry in Free Flap Adjunct Monitoring

Presenter: James C. Yuen, MD

Affiliation: University of Arkansas for Medical Sciences, Little Rock, AR

PURPOSE: The goal of this study is to evaluate the differences and similarities between near-infrared spectroscopy (NIRS) with laser Doppler flowmetry (LDF) in adjunct monitoring of free flaps. Their efficacy, recorded data trend,