Utilization of Telehealth to Evaluate Revision Total Joint Arthroplasty Patients

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INTRODUCTION:
Patients who may need revision arthroplasty (RTJA) present many challenges and require more resources. Many such patients are referred to tertiary care centers, which may decrease their ease and timeliness of access to care. The purpose of this study is to evaluate the efficiency of RTJA patient evaluation in a tertiary care setting and to determine the feasibility of evaluating such patients via telehealth to improve office efficiency and patient access.
METHODS:
We identified a consecutive series of patients newly evaluated for a symptomatic knee or hip arthroplasty by two academic surgeons over a one-year time period. Clinical records, radiographs, and laboratory values were reviewed for abnormal findings, assessments, and whether the patient was indicated for revision. The efficiency of these patient evaluations, defined as the percentage of evaluated patients who were indicated for surgery, was determined. We then used the modalities required for diagnosis in each RTJA case to determine the feasibility of improving office efficiency and access for RTJA patients by screening them through telehealth.
RESULTS: Of the 377 patients evaluated for RTJA candidacy, 155 (41.1%) were indicated for revision surgery. All 55 patients indicated for hip revision could have been evaluated and diagnosed via telehealth, increasing the office efficiency from 36.4% to 100%. All 100 patients indicated for knee revision could have been evaluated and diagnosed via telehealth, except for 15 patients indicated for instability, which requires an in-office physical exam for diagnosis. If all knee revision patients had been screened via telehealth, with reports of instability symptoms prompting an office visit, office efficiency would improve from 44.2% to 87.7%.
DISCUSSION AND CONCLUSION: Telehealth may be a useful screening tool for evaluating patients with symptomatic knee or hip arthroplasty. The use of this platform can improve the efficiency of in-office evaluations and limit potential barriers to healthcare access.