

Postoperative Follow-Up Visit Reimbursement in Shoulder Surgery - A Review of CPT Code 99024

David Dallas-Orr, Sahej Randhawa, Ahmed I Zabiba, Mandeep S Chhokar, Safdar Nasim Khan, Ryan Freshman, Christopher Bayne, John Patrick Meehan, Zachary Lum

INTRODUCTION: Postoperative follow-up visits are a critical component of patient care after total shoulder arthroplasty (TSA) or arthroscopic shoulder procedures. Under the current 90-day global period billing model, reimbursements are based on the assumed average of 2 postoperative follow-up (PFU) visits regardless of procedure complexity or patient comorbidities. However, concerns exist on whether this current model accurately reflects post operative care as it may not account for factors that may require additional follow up frequency such as case complexity and comorbidity associated complications. This study evaluated postoperative visit frequency of TSA and arthroscopic shoulder procedures using CPT code 99024.

METHODS: TSA and arthroscopic shoulder procedures from 2017 to 2023 were evaluated. The arthroscopic shoulder procedures included the following Current Procedure Terminology codes: CPT-29805, CPT-29806, CPT-29807, CPT-29819, CPT-29820, CPT-29821, CPT-29822, CPT-29823, CPT-29824, CPT-29825, CPT-29826, CPT-29827, CPT-29828, CPT-S2300. The postoperative visit frequencies were evaluated using the CPT code 99024. The mean postoperative follow-up visit frequency for each procedure group was compared to the expected mean of 2. Each procedural group was split into low-risk and high-risk groups based on the frequency of follow-up visits, (low risk: ≤ 2 ; high risk ≥ 3). The rates of comorbidities were compared between groups, and a p-value with Bonferroni correction was used to determine statistical significance ($p < 0.00016$).

RESULTS: The study included a total of 705,388 shoulder arthroscopy patients, and 149,310 TSA patients, that received care from 2017 to 2023. The mean postoperative follow-up visit frequency for the shoulder arthroscopy group was 2.26, and for the TSA group was 2.41. For each group the postoperative follow-up visit frequency was significantly greater than 2 ($p < 0.001$). 37.2% of patients had 3 or more PFU visits after shoulder arthroscopy, and 40.5% of patients had 2 or more PFU visits after TSA. For shoulder arthroscopy, the high-risk patients were more likely to have peripheral vascular disease (OR: 1.09, CI 95% [1.04,1.14]; $p = 0.00015$). In the TSA cohort, high-risk patients were not found to have a significantly higher risk of any of the comorbidities evaluated.

DISCUSSION AND CONCLUSION: This study highlights that a large proportion of shoulder surgery patients require more than 2 postoperative follow-up visits. Possible modifications to the billing structure for CPT-99024 could incorporate comorbidity-based risk stratification. For example, the reimbursement for shoulder surgery follow-up visits is adjusted based on the presence of comorbidity peripheral vascular disease. In conclusion, this study suggests that the current global period billing structure may need to be revised to better account for physician workload during the 90-day global period.