

Vascular Care Delivery in COVID-19 Pandemic: Impact Use of an Office-Based Laboratory and an Ambulatory Surgery Center for Vascular Care Delivery Reduced the Risk of COVID-19 Transmission and Resource Utilization During the COVID-19 Pandemic

[Please provide the preferred name(s), initials, and surname of the author(s) and their highest earned academic degrees, listed in the order that these should appear if the manuscript is published]

[Please provide the departmental and institutional affiliations of each author]

Correspondence to: [Please provide the name and contact information for the corresponding author]

Abstract

Introduction: On March 20, 2020, the American College of Surgeons (ACS) released guidelines recommending the curtailment of elective surgical procedures in response to the coronavirus disease (COVID-19) pandemic. We immediately implemented these guidelines in our vascular surgery practice. The aim of this study was to compare the characteristics of surgeries performed in our practice in the 6-week periods before (Period 1) and after (Period 2) the release of the ACS guidelines.

Methods: The records of patients who underwent ~~Vascular~~ vascular procedures performed by our group during the 126-week study period before COVID-19 restrictions (Group 1) and in the first 6-week period during the COVID-19 restrictions (Group 2) were reviewed. The number of

procedures performed were facility type was categorized classified as hospital inpatient (HIP), hospital outpatient (HOP), office-based laboratory (OBL), ambulatory surgical center (ASC), and vein center (VC). The procedures type were also grouped was classified as: aneurysm (AAA), carotid (CAR), peripheral arterial disease (PAD), amputation/wound care (AMP), vascular access (VA), deep vein thrombosis (DVT), or chronic venous insufficiencyreflux (CVI). The number of healthcare provider contacts points for each per patient undergoing care procedures at in the HOP, OBL, and ASC was were also collected and compared between groups the periods 1 and 2. The significance of Differences differences between groups the periods were was determined using the two-way analysis of variance ANOVA.-

Results: There were no statistically significant differences between groups 1 and 2 for The procedure location or facility and procedure types did not differ significantly by period ($P = .xxx$ and $P = .yyy$, respectively) of procedure ($p > 0.05$). Patients who received ambulatory care, Patient the number of contacts with healthcare providers was significantly lower during Period 2 than during Period 1 (mean/median: [x] versus [y]; $P = .0xx$) decreased between groups 1 and 2 for ambulatory care. However, projecting During Period 2, the mean/median number of provider contacts per patient was significantly higher among those who received for patients in group 2 if they had to have ambulatory care in the HOP (11) setting (913) compared to contacts than in those who received care in the OBL (4) and ASC (6; $P = .0xx$) setting (588) was statistically significant ($p < 0.05$). No healthcare-associated cases of COVID-19 were reported among patients or staff member at in the OBL or ASC during Period 2 developed COVID-19 infection cause of the care received at these venues.-

Conclusion: During the height of the COVID-19 pandemic, The ability to provide provision of essential vascular care for to ambulatory patients in an ambulatory environment was enhanced by

using ~~our~~the OBL and ASC to limit their contact with healthcare workers, without compromising safety or adversely affecting the outcomes, efficacy,  transmission of the virus to patients or staff during the height of the COVID-19 pandemic and limited their contact with healthcare workers and therefore reduced the consumption of personal protective equipment by healthcare personnel.