



Leveraging Advanced Practice Clinicians for Surgical Practices During a Time of COVID-19

Wayne Mathews*

UNMC PA Program, College of Allied Health Professions, Bennett Hall, Omaha, USA

***Corresponding author:** Wayne Mathews, UNMC PA Program, College of Allied Health Professions, Bennett Hall, Room 4002C, Omaha, NE 68198, USA.

Citation: Mathews W (2021) Leveraging Advanced Practice Clinicians for Surgical Practices During a Time of COVID-19. J Surg 6: 1433. DOI: 10.29011/2575-9760.001433

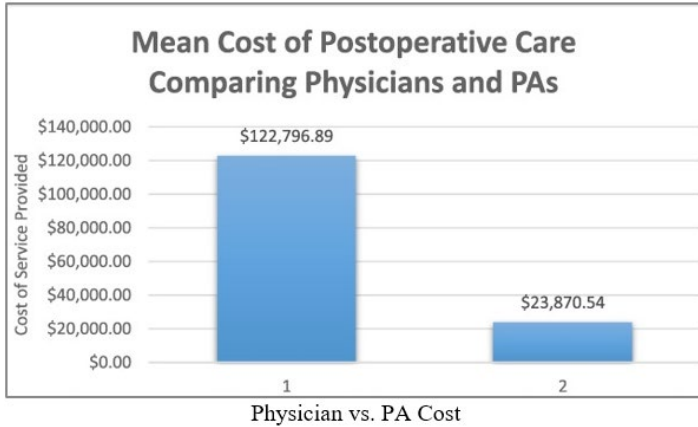
Received Date: 21 September, 2021; **Accepted Date:** 30 September, 2021; **Published Date:** 04 October, 2021

There has been a marked impact from COVID-19 on both elective surgeries and emergency surgeries performed in 2020-2021. One article based on surveying 98 centers from 31 countries noted that 87.8% of centers reported a decrease in emergency surgeries performed, and significant delays in triage of emergent surgical cases, and an increase of surgical complications, such as septic cholecystitis and perforated appendicitis [1]. Even more drastic reductions of elective operations have been noted in almost every hospital nationally [2]. These reductions in surgical procedures, both emergent and elective, have challenged staffing and workflow for every surgical department, and continue with hospital admissions and challenged resources from patients demanding acute care resources from COVID-19. Surgeon burnout is another negative outcome of the COVID-19 pandemic. Available data suggest that more than 50% of practicing surgeons and nearly 70% of general surgery residents meet the posited criteria for burnout [3]. One method is to allow the surgeon to delegate assigned tasks to a qualified practitioner, such as a trained PA or NP, in order to concentrate on acute surgical tasks in both the operating room and surgical planning and management of outcomes. Advance practice clinicians, such as Physician Assistants and Nurse Practitioners, can be a viable solution to the multi-faceted issues associated with caring for surgical patients in an environment of COVID-19. APP's can insure a 'clean surgical service' by assisting and coordinating the screening and triage of COVID-19 testing as an adjunct to pre-operative assessment for the surgical service, freeing the surgeon to concentrate on the surgical patient and the specific problem at hand. In addition, APP's can spend time with patients answering questions, educating them about procedures, prognosis, and patient outcomes to be expected. This can free up surgeon's valuable time. This model has proven to improve patient outcomes in Intensive Care Units [4].

During the COVID-19 Public Health Emergency (PHE), CMS has allowed for many Medicare program flexibilities

to free health professionals to extend care under dire clinical circumstances. One flexibility authorized direct supervision, which typically means on-site presence, to be accomplished through audio/visual communication methods. AAPA supported this provision in order to ensure an "all hands on deck" environment for delivering care during the PHE. There are different models of PA and NP utilization in the healthcare system. PA's and NP's can substitute for physician care, complement physician services, or do both simultaneously. Substitution involves rendering a service that a physician would otherwise provide, whereas complementing refers to providing an added function that a physician would not otherwise offer and is intended to enhance the patient's visits. Substituting for a physician's activities frees up a physician's time, allowing it to other activities or services such as patient education, health promotion and preventative care, and cohesiveness of responsibility to improve the overall quality of the principal diagnosis. The benefits of using physician substitution include increasing physician efficiency and productivity, reducing physician workload, increasing patient access, and reducing costs of services [4]. This can be accomplished while preserving patient safety and capitalizing on the surgeon's expertise by the use of electronic means such as telehealth. Telehealth consultations can now be conveniently performed on portable platforms, such as smartphones or laptops. This practice has been employed successfully during the COVID-19 pandemic, with the following guidelines stated by Prasad et al: "the virtual visits. Physicians should use a high-resolution camera, such as one from a laptop or an external webcam, and dress professionally. Furthermore, physicians should ensure their face is clearly seen in their video and that there is ample lighting. It may be advisable for physicians to have the materials recommended for patients easily available, such as a flashlight and napkins, in order to demonstrate aspects of the exam on themselves if patients are having difficulty. Having access to a high-quality Wi-Fi or network is essential." [5].

This practice of utilizing APP's has been demonstrated to be a cost effective and safe way to deliver post-operative orthopedic surgical care using APP's: Figure 1 [6].



Horak, Shaun; Mathews, Wayne, *JBJS Journal of Orthopaedics for Physician Assistants* 8(3):e19.00046, July-September 2020. doi: 10.2106/JBJS.JOPA.19.00046

In conclusion, the utilization of trained APP's (physician assistants and nurse practitioners) can be a force multiplier for the attending surgeon to both manage safe practices in both emergent and elective surgical cases, and alleviate the disruption to a

surgical service, which is associated with the excessive demand for hospital resources during the current COVID-19 pandemic. Innovative electronic means, such as real-time telehealth, augment the use of these skilled practitioners, while conforming to current CMS reimbursement guidelines.

References

1. Reichert M, Sartelli M, Weigand MA, Doppstadt C, Hecker M, et al. (2020) Impact of the SARS-CoV-2 pandemic on emergency surgery services-a multi-national survey among WSES members. *World J Emerg Surg* 15: 64.
2. Diaz A, Sarac BA, Schoenbrunner AR, Janis JE, Pawlik TM (2020) Elective surgery in the time of COVID-19. *Am J Surg* 219: 900-902.
3. Senturk JC, Melnitchouk N (2019) Surgeon Burnout: Defining, Identifying, and Addressing the New Reality. *Clinics in colon and rectal surgery* 32: 407-414.
4. Grant M (2015) Resolving communication challenges in the intensive care unit. *AACN Adv Crit Care* 26: 123-130.
5. Prasad A, Brewster R, Newman JG, Rajasekaran K (2020) Optimizing your telemedicine visit during the COVID-19 pandemic: Practice guidelines for patients with head and neck cancer. *Head Neck* 42: 1317-1321.
6. Horak, Shaun, PA-C, Mathews, Wayne, et al. (2020) Quantifying the Economic Value of a Physician Assistant in Orthopaedics, *JBJS Journal of Orthopaedics for Physician* 8.