oncological characteristics, hospital characteristics, and type of procedure performed. This cost variation based on race warrants further investigation.

111 The Impact of Coronavirus (COVID-19) Pandemic on the Neurosurgeons Worldwide

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INTRODUCTION: Although primarily a respiratory disorder, the coronavirus pandemic has paralyzed almost all aspects of healthcare delivery. Neurosurgeons provide critical care and their role in this pandemic is necessary and yet evolving.

METHODS: Through professional registries and internet resources, we surveyed neurosurgeons from around the world. We looked at the national burden of illness, perception of preparedness, cancellation of clinics, surgeries and cessation of research and educational activities. Chi-square, Fisher’s exact tests, and multivariate logistic regression model were used to analyze variables.

RESULTS: Our survey was completed on April 3, 2020, and was well-received (661 completed, 60.7% response rate, 96 nations). Neurosurgeons in affluent nations still lacked adequate resources to combat this pandemic primarily due to lack of preparedness and insufficient medical equipment. The challenges to lower-income nations were similar but also included knowledge dissemination and inadequate resources. Hospital preparedness was central to effective healthcare delivery but also influenced the cancellation of surgeries and clinics. The impact on education, conferences and research was also significant.

CONCLUSION: Neurosurgical disorders are significant casualties of the COVID-19 pandemic. Reduction of services, lack of preparedness, inadequate education, insufficient supplies and resources are important contributors. Improved preparedness requires careful planning, real-time surveillance and allocation of resources. This is more critical in poorer nations.

112 Surgical Utilization Rates and Timing of Care in a Multidisciplinary Spine Clinic versus a Unidisciplinary Spine Clinic Setting

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INTRODUCTION: Our institution created a multidisciplinary spine clinic (MSC), combining the expertise of physiatrists, spine surgeons, and pain interventionists. At the multidisciplinary clinic, a patient is scheduled to see one provider, but that provider can consult other spine specialists during a patient’s clinic visit and have the other specialist meet with the patient during the same visit.

METHODS: We retrospectively reviewed patients who initially visited a neurosurgeon for spine care at either clinic from July 1, 2018 to June 30, 2019. We collected patient demographics, comorbidities, diagnosed spine pathology, final treatment recommendations (surgery, epidural steroid injections (ESI), physical therapy (PT)), and dates of seeing a treating specialist, receiving a treatment recommendation, and undergoing an intervention. Logistic regression was used to assess the likelihood for these treatment recommendations differed between USC and MSC when adjusting for potential confounders: Cox proportional hazards regression was used to assess if times to treatment recommendations differed. All analyses were repeated for the propensity score (PS) matched datasets.

RESULTS: 850 eligible patients were included: 394 initially seen at the USC and 456 at the MSC. Patients in the USC were more likely to be recommended surgery compared to MSC (22.7% vs. 11.4%, P < .001) and less likely to be recommended PT (13.4% vs. 23.3%, P < .001) or ESI (11.6% vs. 17.3%, P = .02). These conclusions still held when controlling potential confounders: USC vs. MSC - Surgery: Odds Ratio [OR] 2.16, 95% CI 1.40-3.35, P < .001; PT: OR = 0.54, 95% CI 0.36-0.82, P = .004; ESI: OR = 0.62, 95% CI 0.40-0.96, P = .03. Lead times to receiving recommendations for PT were faster at the MSC (Hazards Ration [HR] 0.62, 95% CI 0.44-0.89, P = .009) while recommendations for surgery (HR 1.72, 95% CI 1.20-2.46, P = .003) occurred faster at the USC. Analyses using the PS-matched datasets yielded very similar results.

CONCLUSION: Multidisciplinary decision making in an integrated clinic setting can significantly reduce the rates of invasive procedures and also improve lead times to treatment for patients with spinal disorders.

113 Effect of Operating Room Guidelines on Rates of Surgical Site Infections in Patients Undergoing Spinal Procedures: A Single Institution Experience

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INTRODUCTION: Surgical Site Infections (SSIs) for patients undergoing spinal surgery can result in significant health and economic consequences. In 2015, the Association of periOperative Registered Nurses (AORN) published guidelines regarding operating room attire that were quickly adopted by our institution and national accrediting bodies.

METHODS: All adult patients undergoing a spinal operation from 2013–2018 at our institution were identified. Patients were categorized based on the timing of their procedure with institutional operating room policies. Data from the American College of Surgeons National Surgical Quality Improvement Program (ACS-NSQIP) were also collected for comparison.

RESULTS: A total of 4,849 patients were included in this study. The SSI rate was 1.26% prior to the policy change and, 1.44% afterwards (P = .7500). Patients with SSI were found to have longer operative time (P < .0001) higher ASA classification (P = .0003), and different surgery location (0.0012) compared to patients without SSI. Data from the ACS-NSQIP database included 176,821 patients and yielded similar results.