The purpose of this DNP feasibility study was to evaluate whether a Nurse Practitioner-led inpatient palliative care service is an alternative to physician-led palliative care teams in order to expand palliative care to areas that otherwise may not have access. In a 219-bed hospital in rural South Carolina, patients were seen in consult by the palliative nurse practitioner. The NP offered consultative services Monday-Friday 8am – 12pm from September 1 – December 31, 2018. The NP saw 65 patients during the study period with an average of 2.12 visits per patient. Operational metrics were recorded for comparison to The National Palliative Registry in order to establish program validity. Operational metrics from the study group were consistent with data from the national registry. These metrics included demographics including age, ethnicity, and gender; consultation volume; penetration rate; referral specialty; referral locations; disease distribution; discharge distribution; discharge disposition; and length of stay. Additional outcomes measured were 30-day readmission rates, emergency department utilization, hospice referral rates, patient and staff satisfaction. There was a significant difference in the previous admissions and 30-day readmissions (M=1.154, SD=1.848); t(5.035), p=0.00. A paired-samples t-test was also conducted to examine prior admissions to all re-admissions to 90 days. There was a significant reduction from the previous admissions rate and all readmissions through 90 days post discharge (M=1.01, SD=1.92), t(4.25), p=0.00. Prior to palliative care consultation, the sixty-five study patients averaged 2.63 ED visits each. After palliative care consultation, the ED visit average was 0.4 visits per patient. A paired samples t-test was calculated. The results show the reduction in ED usage is significant.
(M=2.231, SD=2.946) t(6.104) p=0.000. The DNP study examined if palliative care consultation resulted in an increase in referrals to hospice. From September – December, 2017, 35 of the 2534 discharges were referred to hospice (M=0.0103, SD=0.100). In 2018, 58 of 2432 discharges were referred to hospice (M=0.239, SD=0.152). This equaled a difference of 1%. This measured increase in hospice referrals was also significant, t(7.707), p=0.00. Staff knowledge of palliative care was tested pre- and post-study using The Palliative Care Quiz for Nurses. Mean score prior to the palliative care study was 69.6 and post test score was 83.5. Staff also indicated feeling more confident in end-of-life discussions and communicating with patients and family members about goals of care and end-of-life matters. A survey was also given post-intervention to evaluate staff response to palliative care. Results show staff were extremely pleased with palliative care, felt like their patient’s symptoms were better controlled, felt communication between patient’s, their families and staff increased, and that the family experience of the dying patient was improved. The NP kept billing codes for all patient’s seen. Based on the Medicare 85% reimbursement rate for nurse practitioners, estimated billing revenue would be approximately $15,000. The Impact Calculator available from The Centers to Advance Palliative Care estimate an approximate savings of $2374 per patient. This results in $154,000 savings for the 65 patients seen during the study. Billing revenue increases this to $169,000 for the four months patients were seen. CAPC’s impact calculator also estimates palliative care nurse practitioner salary with benefits to be approximately $135,450 annually and MD salary is estimated to be approximately $270,900. NP-led programs can have two NP providers for the same cost as one physician. Results from the national registry have shown that more team members improve patient reach thus extending additional savings. The DNP
study indicates that in rural areas where palliative care services may not be available, and NP-led program is cost effective, results in decreased 30-day readmission rates, decreased ED utilization, increased hospice referrals, improved staff and patient satisfaction, and provide these services potentially without hospital investment.