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Correlation of Relative Value Unit Reimbursement in Trauma Surgery with Academic Productivity

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Background

- All surgical cases at LVHN are coded and then assigned work related relative value units (wRVUs) from which monetary reimbursements are generated.
- RVUs are defined by Medicaid and Medicare and are intended to account for physician work, practice expenses, and professional liability insurance.
- The basis of the traditional RVU model is based on clinical performance, however academic endeavors are left out by this model.
- There have been proposals of an academic RVU model (aRVU) which would generate values based on assessment of productivity in areas aside from solely the clinical performance such as: research and publications, resident/student teaching, and other services in the administrative and community setting.

Objective

- To determine if increased wRVU generation correlates with decreased academic productivity within a fiscal year.

Methods

- Retrospective database review of LVHN Scholarly Works, PubMed, and Trauma Department records.
- RVU totals were collected and totaled from all available corridor reports per trauma surgeon in each month of fiscal years 2007-2019.
- Academic publications were collected for all full-time trauma surgeons in fiscal years 2007-2019 through cross referenced searches of PubMed and LVHN Scholarly Works Database.
- Descriptive statistics were generated using Stata program to determine correlation of variables.
- Averages for each variable were calculated for comparison throughout study timeline.
- Two surgeons were selected for comparison in RVU and academic productivity.

Results

- Pearson correlation coefficient between total wRVU generation and academic publications per month of fiscal years 2007-2019 was R=.0138.
- The average monthly number of academic publications before 2013 were ~5.06 and ~3011.97 respectively.
- The average monthly number of academic publications and RVUs after 2013 were ~4.3 and ~7410.72 respectively.

Conclusion

- The traditional wRVU model undervalues and jeopardizes academic activities that are not compensated.
- There exists little to no direct correlation of wRVU units generated and academic publications for trauma surgeons at LVHN for fiscal years 2007-2019 (Figure 1).
- Approximately midway through the study timeline from fiscal years pre 2013 (2007-2012) to post 2013 (2013-2019), academic productivity showed a decrease, while wRVU reimbursement showed an increase (Figure 2).
- Trauma surgeon B had their most productive year in RVU generation, yet produced only 1 academic publication, only 4.55% of trauma surgeon A (Figure 3).
- Direct comparison shows a high RVU generation may leave a surgeon less time for academic pursuits.

Future Direction

- Proposal of an academic (aRVU) model may make up for discrepancies found between wRVUs and academic pursuits at LVHN.
- Investigate other variables surrounding wRVU generation.
- Average time spent to generate wRVUs and how this affects academic endeavors.
- Investigate correlation with other academic endeavors.
- Administrative services.

References: