## "I'm Dying Over Here!"...How to Justify Additional Trauma Registry FTE

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**Purpose:** The American College of Surgeons (ACS) recommends a ratio of 1.0 FTE trauma registrar for every 500-750 trauma registry patients. The hospital transitioned from a Level II to a state designated and ACS verified Level I trauma center. Volume growth was appreciated prior to site visit, however, magnified after the official Level I announcement, demonstrating an increase of 20% patient volume over 9 months (Figure 1). Over the same time period, a sister hospital that is a Level III state designated trauma center and shares registrar staff, also experienced 18% growth (Figure 2). The registrars were unable to meet the abstraction demands in a timely fashion in addition to other job duties falling to a 60 day + registry backlog. A time study was completed to assess factors that affected trauma registrar productivity, which resulted in a request for an additional 1.5 FTE trauma registrar positions.

**Resources:** This project used a time study tool completed by the registry professionals for the period of a week. Data was collected by the trauma program manager and reported out in a document that translated information into an full time equivalent (FTE) format.

**Description:** An action plan was developed to justify additional FTE requests, which included trauma registry criteria, but also included additional patients who were entered into the registry for other data gathering and research purposes. This resulted in an "all patients touched" number. Secondly, a detailed time study was performed to include all daily duties for a 1-week period of time for each registrar, beyond data abstraction. This data was then translated into time and used to justify additional FTE requirements (Table A). This information was then submitted to senior leadership to support the requisition requests.

**Effectiveness:** We used a 1:500 ratio and justified the lower threshold related to ICD 10 and acuity increase. This produced a baseline FTE requirement for current state abstraction of trauma registry patients. Additional data points data points were incorporated to include: patient identification process and entry into database of all patient contacts, required department meetings and education, inter-rater reliability validation, and miscellaneous tasks such as database maintenance, emails, etc. These additional components justified another 2.0 FTE based on annualizing time. After approval of additional 1.5 FTE we were able to reduce the registry backlog from over 60 days down to a concurrent status within 7 months.

**Lessons Learned:** This process was successful as it we were able to adapt a financial justification process that clinical departments routinely use to justify FTE positions.

For this reason, hospital administrators were able to understand the data driven request.

In the end, this method helps to support FTE beyond the minimum staffing recommended by the American College of Surgeons by incorporating other job duties beyond National Trauma Data Bank (NTDB) data points; to include site and state specific data points, patient selection, registry maintenance, and meetings.

In retrospect, we appreciated the time study tracking tools were not completed in a consistent manner. Both consistency and accuracy could be improved with more instruction given to the registry staff members at time of implementation. The justification tool also requires revisions to reflect institution specific functions and updates.

**Conclusions:** We continue to review registry processes using LEAN methodology to reduce waste, we have also shared this methodology with another hospital. This resulted in an increase of an additional trauma registrar 1.0 FTE, confirming this is an effective justification tool.