

February 8, 2021

North Carolina Division of Health Service Regulation

Dear Review Committee members,

As a trauma care provider and lifelong North Carolina resident, I appreciate the opportunity to submit my comments and concerns related to the revisions proposed to the state trauma rules.

**Rule 10A NCAC 13P .0904 “Initial Designation Process”**

Section (b)(3) – I fully support the removal of the volume requirements for initial designation of a Level II Trauma Center to align State designation criteria with the American College of Surgeons “Resources for Optimal Care of the Injured Patient” but believe the proposed changes do not go far enough to sufficiently ensure equitable distribution of trauma care delivery systems across the state of North Carolina.

- Trauma centers, seeking designation for the first time and who share a catchment area with existing centers, are held to an unreasonable volume requirement that is largely driven by EMS destination protocols and previous similar care experiences by the lay public.
- In lieu of the trauma volume requirement and to ensure adequate distribution of trauma resources across the state, I would support the implementation of an objective assessment or geo-spatial evaluation tool to effectively evaluate and recommend new and upgraded trauma centers. Tools such as the evidence-based Needs Based Assessment of Trauma Systems (NBATS) tool from the American College of Surgeons<sup>1</sup> have been studied extensively and found to be reliable predictors of trauma system needs in both urban and rural markets<sup>2345</sup>.
- Census data supports the increase in Level 1 and 2 trauma centers across the state and particularly in the Metrolina region<sup>6</sup>. The Metrolina region saw a 15% increase in population over the past 10 years and while making up 23% of the state’s total population, has a single Level 1 center as compared to five Level 1 and three Level II centers in other regions<sup>7</sup>.
- The equitable distribution of trauma services has been proven to decrease mortality from traumatic injury. A 2016 research study scored North Carolina among the lowest across the United States for “number and density per million population of trauma centers, surgical critical care providers, and surgical critical care fellowships”<sup>8</sup>.

Section (e) – I do not support the changes to this section related to the notification and participation from the applicant’s respective Board of County Commissioners in the evaluation of trauma care readiness.

- As a citizen of one of the most rapidly growing metropolitan areas in the state, the collaboration of our local healthcare organizations and partnerships with city, county, and state government is essential for emergency preparedness and the overall health and safety of our region.

Respectfully,

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- <sup>1</sup> Winchell, R.J., Stewart, R.M., Price, M. (2016). Committee on Trauma introduces needs assessment tool aimed at resolving trauma center debate. *Bulletin of the American College of Surgeons*, pub Sept.1, 2016. Retrieved 1/28/2021
- <sup>2</sup> Dalton, M.K., Uribe-Leitz, T., Hashmi, Z., Salim, A., Haider, A.H., Jarman, M.P. (2020). A national assessment of trauma systems using the American College of Surgeons NBATS tool: Geographic distribution of trauma center need. *Ann Surg*. 2020 Oct 15. doi:10.1097/SLA.0000000000004555. Epub ahead of print.
- <sup>3</sup> Dooley, J.H., Ozdenerol, E., Sharpe, J.P., Magnotti, L.J., Croce, M.A., Fischer, P.E.. Location, location, location: Utilizing Needs-Based Assessment of Trauma Systems-2 in trauma system planning. *J Trauma Acute Care Surg*. 2020 Jan;88(1):94-100. doi: 10.1097/TA.0000000000002463.
- <sup>4</sup> Horst, M.A., Jammula, S., Gross, B.W., Bradburn, E.H., Cook, A.D., Altenburg, J., Morgan, M., Von Nieda, D., Rogers, F.B.. Development of a trauma system and optimal placement of trauma centers using geospatial mapping. *J Trauma Acute Care Surg*. 2018 Mar;84(3):441-448. doi: 10.1097/TA.0000000000001782.
- <sup>5</sup> Winchell, R.J., Xu, P., Mount, L.E., Huegerich, R.. Development of a geospatial approach for the quantitative analysis of trauma center access. *J Trauma Acute Care Surg*. 2019 Mar;86(3):397-405. doi: 10.1097/TA.0000000000002156.
- <sup>6</sup> [www.census.gov/quickfacts](http://www.census.gov/quickfacts). Retrieved 1/27/21.
- <sup>7</sup> [https://info.ncdhhs.gov/dhsr/EMS/trauma/pdf/trauma\\_center.pdf](https://info.ncdhhs.gov/dhsr/EMS/trauma/pdf/trauma_center.pdf). Retrieved 1/29/21.
- <sup>8</sup> Rios-Diaz, A. J., Metcalfe, D., Olufajo, O. A., Zogg, C. K., Yorkgitis, B., Singh, M., . . . Salim, A. (2016). Geographic distribution of trauma burden, mortality, and services in the United States: Does availability correspond to patient need? *Journal of American College of Surgeons*, 223, 764-773.