The Ohio Senate
Senate Health, Human Services, & Medicaid Committee
Senator Dave Burke, Chair

Senate Bill 302
Opponent Written Testimony

Chair Burke, Vice-Chair Huffman, Ranking Member Antonio, and members of the Senate Health, Human Services, & Medicaid Committee, thank you for the opportunity to provide written testimony to respectfully raise some of our concerns surrounding Senate Bill 302 ("SB 302"), which would require the State Board of Emergency Medical, Fire, and Transportation Services to develop guidelines for the assessment, triage, and transport of stroke patients that must then be used to develop the written protocols for each EMS region. SB 302 also requires each EMS organization to provide to its EMS personnel training in the assessment and treatment of stroke patients that specifically addresses large vessel occlusion.

We appreciate the general aim of the bill and agree that Ohioans deserve the best stroke care that is available. We never stop looking for ways to improve patient care, but we are concerned that this bill could lead to unintended consequences that would negatively impact the majority of patients with acute stroke in the pursuit of improving care for a markedly small percentage of stroke patients. All stroke patients deserve the highest quality and best value care, which is why we hope to work with the legislature to make the process more balanced to avoid a one-size fits all solution in the development of guidelines and protocols.

University Hospitals ("UH") is a Cleveland-based super-regional health system that serves more than 1.2 million patients in 15 Northeast Ohio counties. UH strives across all its hospitals to strengthen the health care needs of our community by providing outstanding service, the highest quality physicians and nurses, and using innovative techniques. The hub of our 19-hospital system is UH Cleveland Medical Center, a 1,032-bed academic medical center.

In September, UH Cleveland Medical Center became the first hospital in Ohio to attain all four (4) of the American Heart Association/American Stroke Association's highest awards for stroke care[1]. The four (4) 2020 awards are: "*Get with the Guidelines*-Stroke Gold Plus"; "Target: Stroke Honor Roll Elite Plus"; "Target: Stroke Honor Roll Advanced Therapy"; "Target: Type 2 Diabetes Honor Roll". These awards speak to the excellence of the stroke program at UH. We have worked diligently over the past 12 years to provide the highest levels of stroke care and education to the residents of Northeast Ohio. UH Cleveland Medical Center was also the first hospital in Northeast Ohio to achieve The Joint Commission's rigorous standards for Comprehensive Stroke Center Certification[2]. This certification showcases our ability to treat

[1] https://www.uhhospitals.org/for-clinicians/articles-and-news/articles/2020/09/uh-cmc-first-hospital-in-oh-to-attain-ahas-all-four-highest-awards-for-stroke-care#:~:text=University%20Hospitals%20Cleveland%20Medical%20Center,The%20Guidelines%2DStroke%20Gold%20Plus

[2] https://www.uhhospitals.org/services/neurology-and-neurosurgery-services/conditions-and-treatments/stroke-and-vascular/stroke

the most complex stroke cases. We are proud to say that our stroke program has grown and expanded to a world-class program, truly one of a kind in the state. UH's Stroke Program is a comprehensive system of stroke care across Ohio comprised of an additional nine (9) certified Advanced Primary Stroke Centers, whose high quality stroke care has also been recognized by American Heart Association/American Stroke Association "*Get with the Guidelines* – Stroke quality" awards.

We do not believe that it is necessary to revisit further stroke policy so soon after passing HB 464[3] last General Assembly. HB 464 has already been enacted and it did the following:

- Created a process for recognition by the Ohio Department of Health ("ODH") of hospitals as comprehensive stroke centers, primary stroke centers, or acute stroke ready hospitals.
- Prohibited hospitals from representing themselves as a comprehensive or primary stroke center or acute stroke ready hospital unless it is recognized as such by ODH.
- Required the establishment of written protocols for emergency medical service personnel when assessing, treating, and transporting stroke patients.

We are concerned that this legislation may promote the creation of a protocol that would rely upon a pre-hospital provider to make a decision as to which hospital to transport a patient with a suspected stroke. Such a protocol would have the consequence of transporting many more patients to a thrombectomy-capable comprehensive stroke center as a medical necessity, and assumes that there are a large number of patients who are not receiving best practice care at other stroke centers. However, the numbers speak for themselves. According to a 2017 study in the International Journal of Stroke, out of 2,701 consecutive patients with acute ischemic stroke presenting to a certified Primary Stroke Center over 3 years, only 211 (7.8%) of the stroke patients were actually clinically eligible for a mechanical thrombectomy treatment and had imaging evidence of a large vessel occlusion (LVO). Of these, nearly half were not transferred on to the thrombectomy center. One reason for not transferring is a response to the rapid administration of intravenous tPA therapy, whose efficacy in reversing stroke deficits is exquisitely time-dependent.

In other words, only 7.8% of stroke patients over 3 years would have been appropriate for transfer to a thrombectomy center; although in the study, only 1.9% of patients actually received the procedure. These patients were deemed eligible by a physician and baseline imaging with a CT brain scan, as well. Thus, you can see how a protocol that would lead to pre-hospital providers making a transport decision- in the field, without neuroimaging will result in a large percentage of patients transported unnecessarily, potentially delaying their Emergency Room treatment with IV-tPA therapy, and increasing the overall cost of care.

Every second matters when your loved one is having a stroke. Time equals brain. These are life and death situations that require a patient be properly assessed and stabilized at the *closest* hospital. Simply look to the ischemic stroke guidelines from the American Heart Association which we adhere to. Section EMS 1.3 of the 2019 American Heart Association Stroke Guidelines Level 1 evidence[4]:

- Directs EMS to take patients to the closest hospital.
- States that when several hospital options exist within a defined geographic region, the benefit of bypassing the closest to bring the patient to one that offers a higher level of stroke care, including mechanical thrombectomy, is *uncertain*.
- Does not endorse any particular LVO severity score. No *one* clinical assessment scale has been shown to be sufficiently accurate in predicting a specific treatment plan in the field, without physician input, and especially without neuroimaging with a CT brain scan and a contrast CT angiogram.

[3] https://www.legislature.ohio.gov/legislation/legislation-summary?id=GA132-HB-464
[4] https://www.ahajournals.org/doi/pdf/10.1161/STR.0000000000000211

As you know, there is no one size fits all in medicine. Every community has its own unique needs and no two patients are alike, and we worry that this bill could interfere with local decision-making. Patients in rural communities likely have the most to lose here. Some communities rely on a single ambulance to cover 50-100 miles. There is a great potential cost to that community if they must transfer all stroke patients to a comprehensive stroke center nearly an hour away. It would pose an incredible risk to the community if there are any other emergencies that occur during that extended period of time and must wait an hour for the ambulance to return. Even in communities with several near-by hospitals, there are other factors to consider, such as the value of receiving in-network care through urgent access to the data in a patient's medical record and access to their community primary care providers that avoid the out-of-network risk of duplicate or unnecessary tests and treatments.

Importantly, for the majority of stroke patients (*more than 90%*) who do not need to be at a comprehensive stroke center but may be forced to go to one, it puts them at risk of reduced quality of care traveling a farther distance, losing critical time. At the same time, it puts patients at risk of experiencing higher costs if they are transported to a large teaching hospital rather than their local community hospital. It also creates a greater likelihood of being out of network and increases the need for air ambulance, which often come at very high cost and may carry a higher likelihood of being out-of-pocket for the patient. The longer distance also creates an inconvenience to family who will need to travel farther to see the patient in the hospital.

In sum, we have concerns that SB 302 attempts to fix something that is not broken and was already legislated in 2018. We want to avoid a one-size fits all model. Specifically, we are concerned about the likelihood that EMS organizations would be persuaded to ultimately develop protocols that would steer stroke patients to comprehensive stroke patients unnecessarily. For the majority of stroke patients who do not need to be at a comprehensive stroke center, it puts them at risk of reduced quality of care (e.g., losing critical time by traveling a farther distance) and experiencing higher costs.

We greatly appreciate the open dialogue we have experienced with the bill sponsors as we work to get to a better place on this legislation. We have offered these concerns and suggested amendments to improve upon the bill and greatly appreciate their willingness to consider these changes.

Thank you Chairman Burke, Vice-Chair Huffman, Ranking Member Antonio and members of the Senate Health, Human Services, & Medicaid Committee for this opportunity to respectfully provide feedback on this important legislation. We look forward to continuing to work with the bill sponsors and the members of this Committee on SB 302 to ensure we are promoting what is in the best interest of all stroke patients in Ohio.

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