



# UNDERSTANDING OUR DIVERSE LEARNERS' NEEDS

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## WHAT PROBLEM IS ADDRESSED?

The NeuroICU at Emory University affiliated hospitals (EUH Clifton, EUHM, and Grady) hosts learners of various backgrounds and educational levels. We educate medical students, neurology residents, anesthesia and emergency medicine trained critical care fellows, neurosurgery interns and neuroICU fellows. Each of these groups has different learning and service expectations.

## WHAT WAS TRIED?

We sought to survey the different learner groups about their self-perceived confidence in the management of 10 distinctly NeuroICU topics.

Topics were selected that we felt were unlikely to overlap with other rotation. For example, although ischemic stroke is a core diagnosis in the ICU, acute decision making is usually made by the ED and neurovascular team. We thus assessed topics that were specific and unique to problems encountered for patients admitted to the NeuroICU.

The study was IRB approved.

Before their rotation, trainees were asked to self-assess their proficiency using a Likert scale (Novice to Proficient) in 10 core neurocritical care domains

All answers were collected anonymously.

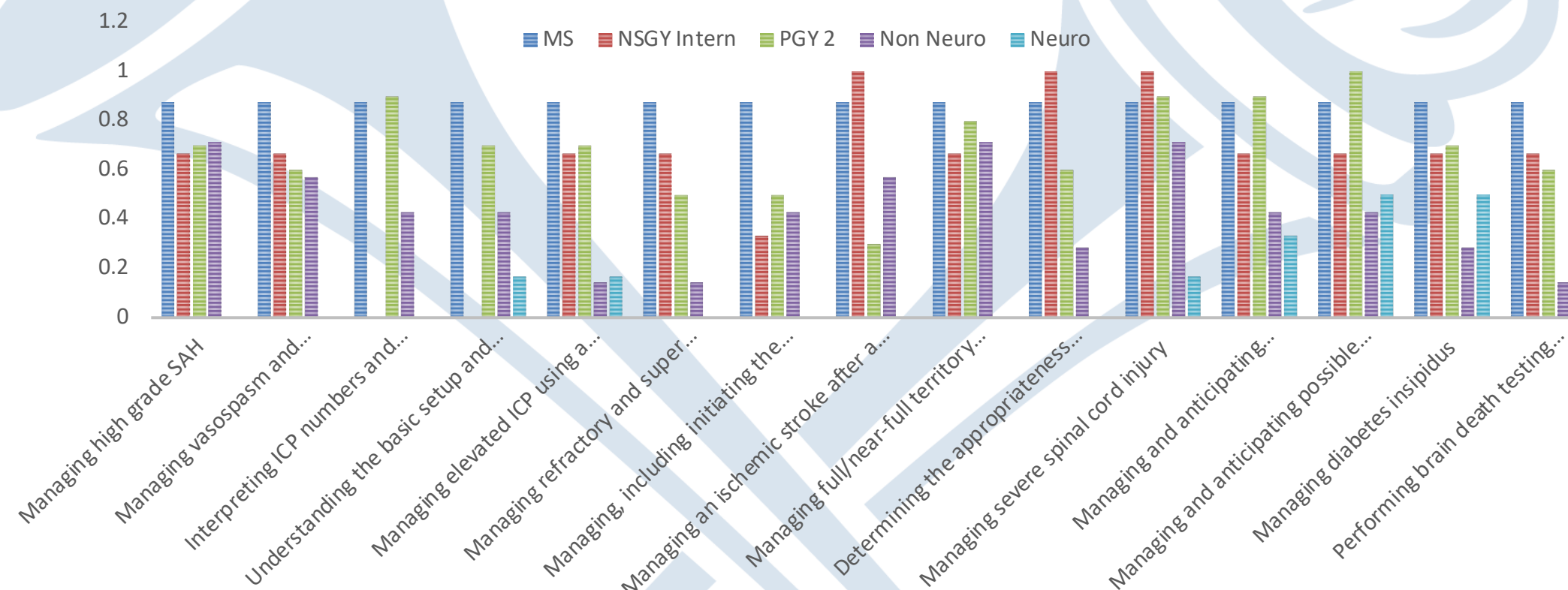
Trainees were then asked to select 3-5 topics (from a menu of the same core topics) that they deemed most important to learn about.

## RESULTS

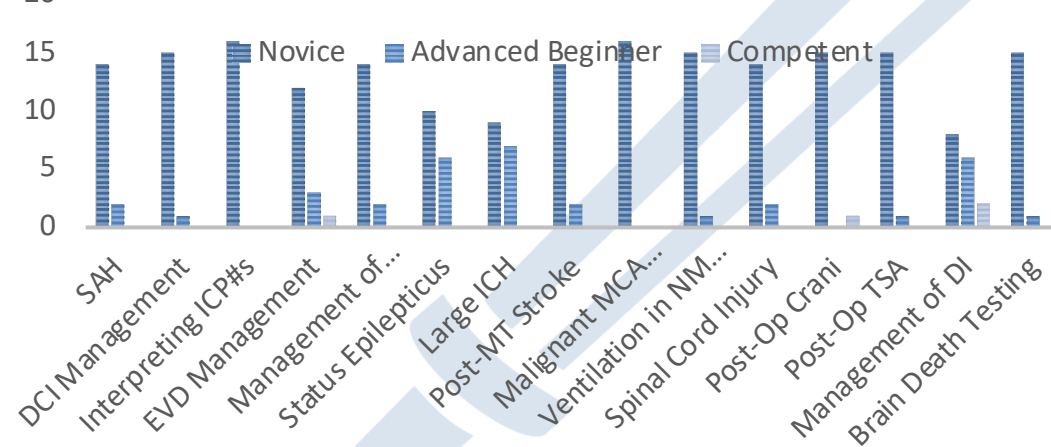
Between July 2021 and March 2022, 47 number of surveys were distributed. 42 students completed the survey (89% completion rate): 16 medical students (100% completion rate-CR), 3 neurosurgical interns (100% CR), 10 neurology junior residents (77% CR), 7 non-neurology critical care fellows (88% CR), and 6 neurocritical care fellows (86% CR).

Eighty-eight percent of medical students, 62% of neurosurgery interns, 70% of neurology interns, 43% general critical care fellows, and 12% of neurocritical care fellows selected novice across all ten core concepts. Both medical students and neurology residents consistently prioritized learning about the management of status epilepticus (SE). Neurosurgery interns were most interested in understanding intracranial pressure waveforms and management of SAH. Non-neurology fellows often selected management of SAH and ICP crisis.

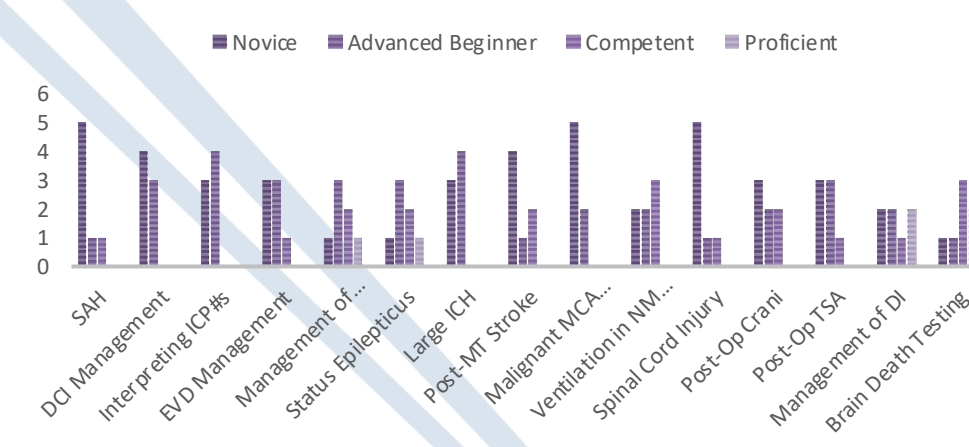
### A NOVICE FEELING



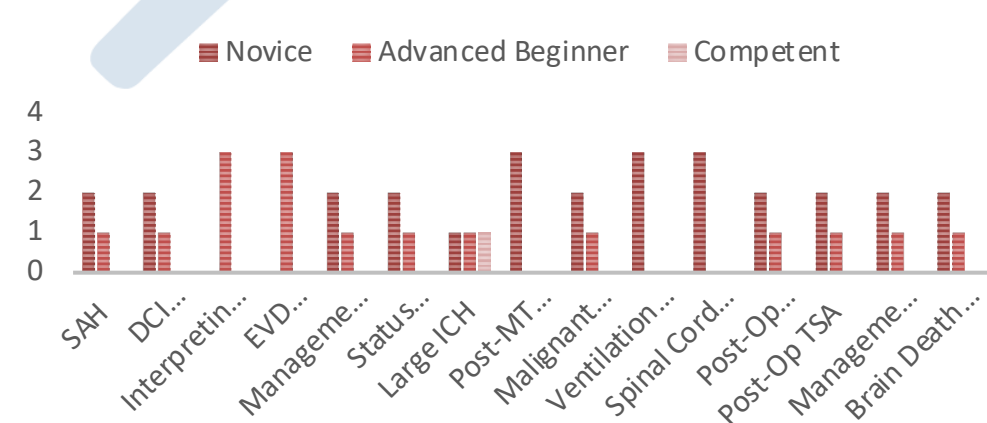
### MEDICAL STUDENTS



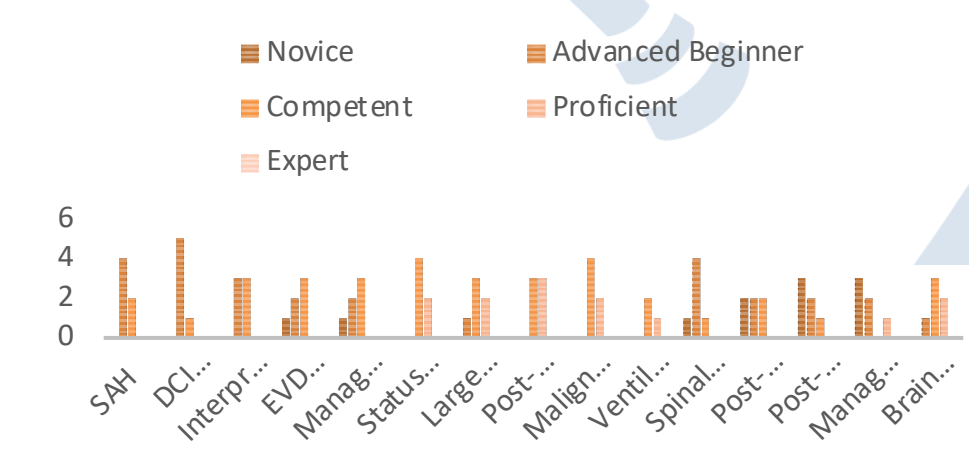
### GENERAL ICU FELLOWS



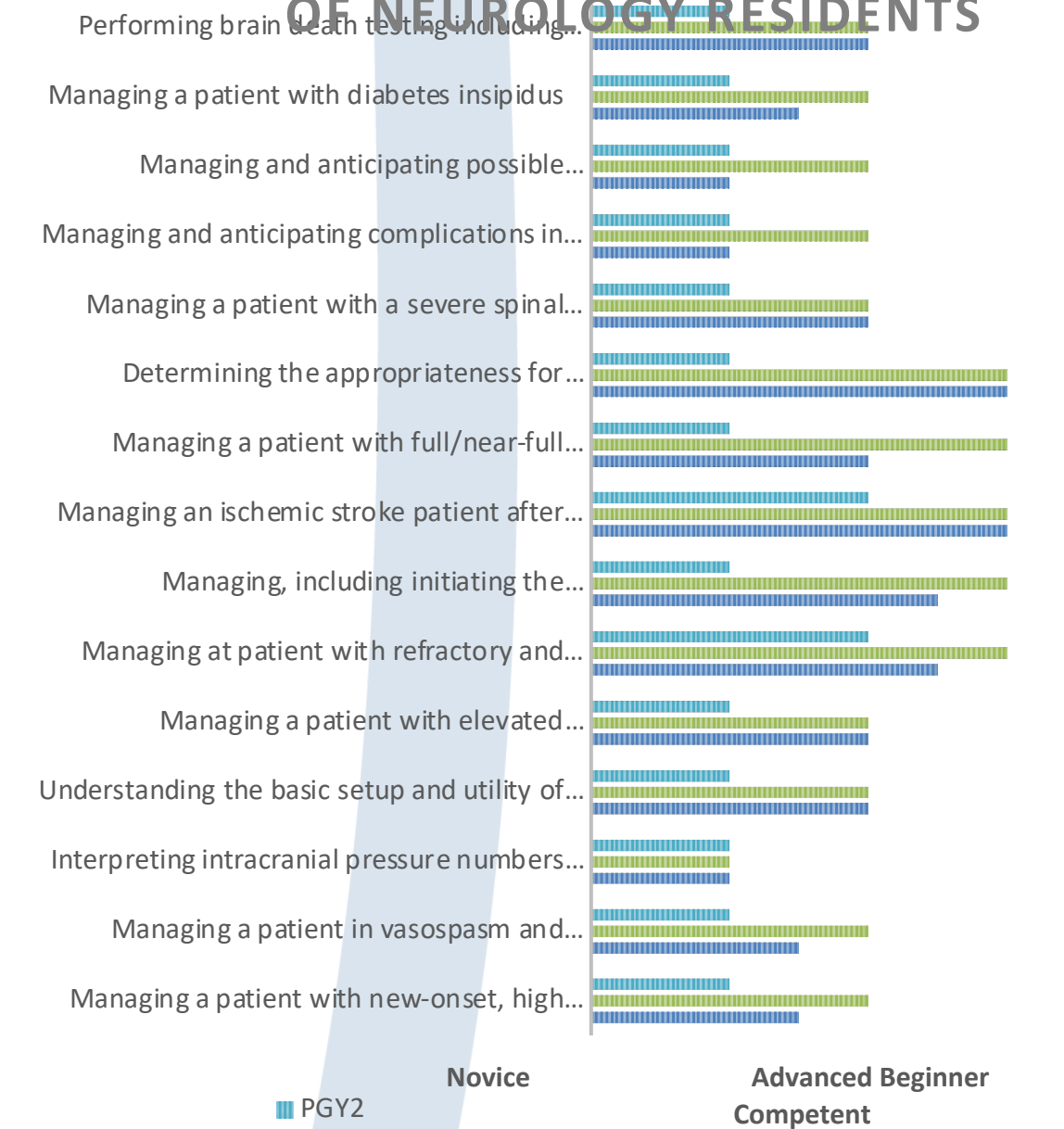
### NEUROSURGERY INTERNS



### NEUROICU FELLOWS



## MEDIAN SELF REPORTED COMPETENCY SCORE BY PGY YEAR OF NEUROLOGY RESIDENTS



## LESSONS LEARNED

This survey was intended to inform curriculum development to make specialized training modules for our learners based on their perceived deficits and what they reported being most interested in learning.

We were struck by how many of our learners selected "novice" in each of the categories. Even among advanced learners there is much uncertainty in how to manage many of these diagnoses.

It was also striking that most PGY4 neurology residents do not feel competent in the management of many neuroICU topics. This clearly indicates a learning need among our rotators.