

Partner service line	Neurology
Target audience	Neurology residents
Target population	Neurology patients at the end of life
Palliative care process	Goals of care discussions
Target behavior	Improve neurology residents' comfort with and knowledge of end-of-life care for neurology patients and use of comfort care order sets

Training (provided to neurology residents)

- ▶ **Internally developed neuro-palliative care lecture series.** Three one-hour lectures presented by the project team titled "Neuro-Palliative Care: Hospice and Palliative Medicine," "Neuro-Palliative Care: Breaking Bad News," and "Neuro-Palliative Care: End of Life Symptom Management." Slides were added to each lecture highlighting correlating Center to Advance Palliative Care (CAPC) modules with links.
- ▶ **Simulation case trainings.** Neurology residents were presented a standardized patient (SP) case and then practiced navigating a goals of care conversation with the SP using learned communication skills. Residents received real-time peer, facilitator, and SP feedback in a safe, evaluation-free environment.
- ▶ **CAPC modules.** Residents were assigned six self-directed CAPC palliative care education modules addressing palliative care foundational knowledge, symptom management, and communication skills.
- ▶ **Neuro-palliative care elective.** Residents were given the option of doing a two-week neuro-palliative rotation with the inpatient palliative care consult team, which included some outpatient neuro-palliative care clinic time and completion of CAPC modules.
- ▶ **As-needed consultations.** The palliative care team provide as-needed consultations to neurology residents.
- ▶ **Neuro-palliative website.** The lecture series recordings and CAPC modules were made available on the neuro-palliative website to further support education penetration.

Identification (patient target population)

- ▶ **Comfort care patients.** Patients approaching the end of life who transitioned to comfort care from the neuro-critical care intensive care unit were the target population for this intervention.

Documentation

- ▶ **Epic documentation.** Patient comfort care orders, advance health directives / POLST (Physician Orders for Life-Sustaining Treatment) forms, and palliative care consults were documented in Epic.

Lessons Learned

CHALLENGES

- ▶ **Finding a new partner service line.** The initial project service line partner was the department of emergency medicine, and the intervention was teaching pain assessment skills to emergency department (ED) nurses. Because the ED was heavily impacted by COVID-19 as the project was ready to launch, the palliative care team decided to identify a new partner service line and intervention. Neurology residents caring for end-of-life neurology patients wanted to increase their skills, knowledge, and competency caring for such patients, so the team shifted to new project partners and objectives.
- ▶ **Accessing Epic data.** The project team had difficulty accessing baseline patient data, including the use of comfort care order sets for dying neurology patients. The process was difficult, time-consuming, and required multiple individual requests for data. The team eventually found an Epic information technology analyst to address their needs and assist them with creating a dashboard with the requested summary data for easier access.

KEY INGREDIENTS AND TAKEAWAYS

- ▶ **Identify a motivated partner champion.** The palliative care project lead found an enthusiastic and committed neurology partner with both neurology and palliative care skills. The two leads collaborated on organizing and presenting all the project activities — lecture series, simulation case trainings, and palliative care elective.
- ▶ **Ensure the activity benefits the partner service line.** Residents were interested in and motivated to improve their communication skills, knowledge, and comfort addressing the needs of end-of-life neurology patients. The project focus on goals of care and primary palliative care skills enabled this group to address these knowledge gaps in their residency training.

PROJECT LEAD TAKEAWAYS

- ▶ **Palliative care lead.** “This particular project was as successful as it was in the shortened time frame that we had because of the partner service line champion’s connection to both palliative care and neurology. That was pivotal for us being able to change our focus midstream and be as successful as we were. Having someone with that specific set of skills is not going to be available to a lot of folks. So I think finding a really committed and interested champion in the [partner] department is absolutely vital.”
- ▶ **Service line lead.** “Our department and our field really are recognizing the importance of palliative care and how we need to change the culture of our training program. So I really didn’t meet much resistance. Feedback from the neurology residents is that they haven’t had this communication skills training in the past, and that they wish that they could lead goals of care meetings more effectively and feel confident providing end-of-life care. It turned out to be a pretty easy project to get everyone excited about.”

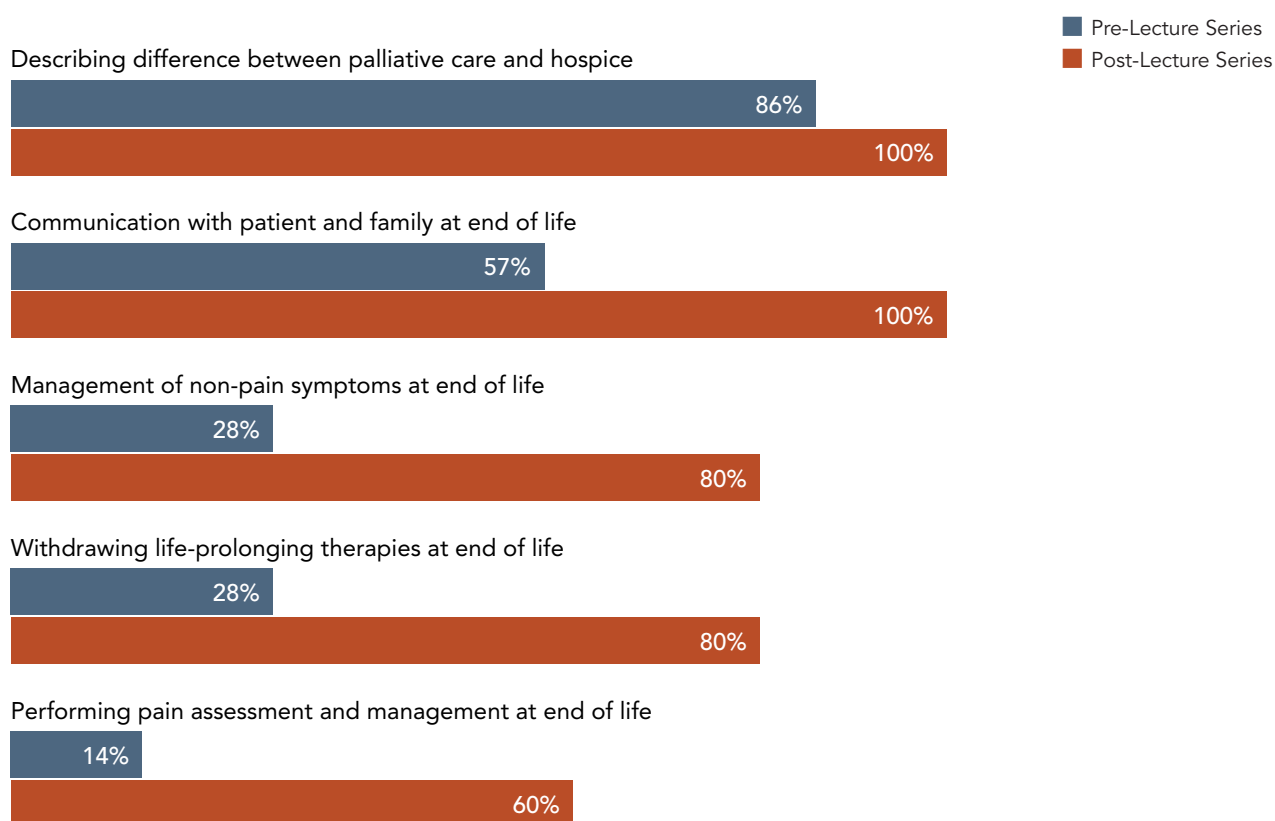
Measures and Key Outcomes

OBJECTIVE 1

NEUROLOGY RESIDENTS' COMFORT WITH AND KNOWLEDGE OF END-OF-LIFE CARE FOR PATIENTS

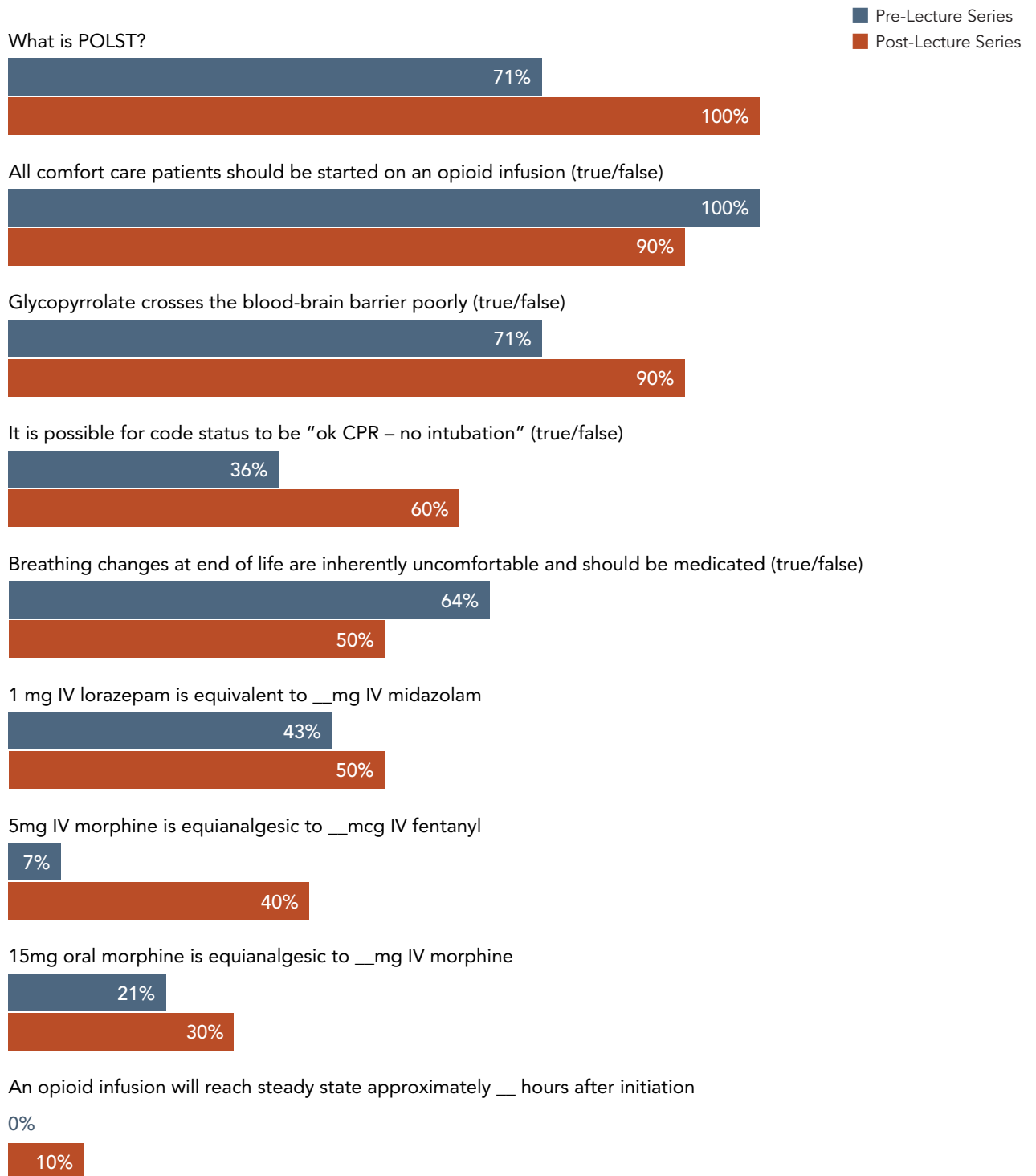
- ▶ All neurology residents (N = 16) were able to participate in some aspect of the curriculum. Participation results included neuro-palliative care lecture series (14 of 16), neuro-palliative care simulation case (13 of 16), CAPC modules (4 of 16), and neuro-palliative elective rotation (4 of 16).
- ▶ Residents were asked to rate their comfort with palliative care topics and skills on a five-point Likert scale from "not at all" or "slightly" to "moderately," "very," or "extremely." Figure 1 reflects the number of residents responding "very" or "extremely."

Figure 1. Residents "Very" or "Extremely" Comfortable with Palliative Care Topics and Skills, Pre- and Post-Lecture Series



- ▶ Tests administered before and after the lecture series revealed improvement in clinical knowledge areas. Supplemental education was offered on topics where knowledge improvement was not achieved. Figure 2 reflects the number of residents responding correctly to the test items noted, before and after the lecture series.

Figure 2. Residents Responding Correctly on Tests of Clinical Knowledge, Pre- and Post-Lecture Series



OBJECTIVE 2

INCREASE USE OF COMFORT CARE ORDER SETS FOR NEUROLOGY PATIENTS AT THE END OF LIFE

- ▶ Between the pre- and post-intervention period, there was a nearly 10% decrease in the number of neurologic patients dying in the hospital and a 12.5% increase in the number of patients discharged to hospice.
- ▶ There was a 12.5% increase in the use of the comfort care order set and a 13% increase in the rate of palliative care consultation.

CLINICAL OUTCOMES	PRE-INTERVENTION (4/20–7/20)	POST-INTERVENTION (4/21–7/21)	PERCENTAGE CHANGE
Total patients	35	36	—
Disposition			
▶ Expired inpatient	16 (45.7%)	13 (36.1%)	-9.6%
▶ All hospice discharge	18 (51.4%)	23 (63.9%)	+12.5%
Comfort care order set used	12 (34.3%)	17 (47.2%)	+12.9%
Palliative consult obtained	11 (31.4%)	16 (44.4%)	+13.0%

Note: Sections may not sum to totals due to rounding.

PROJECT TEAM

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