

Continuing professional development through NeuroBytes: an online e-Learning platform that provides concise, evidence-based updates on high-yield neurology topics

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Key Finding: In only 6 months, NeuroBytes enrolled >5,000 users and appealed to both neurologists and trainees

Takeaway: NeuroBytes is a brief (<5 min) multimedia e-Learning tool that was feasible and effective for delivering continuing education

Background & Aims

A sustainable, cohesive continuing professional development (CPD) system is vital in neurology due to the field's expanding therapeutic options and vulnerable patient populations.

To respond to this need, the American Academy of Neurology has launched several online educational programs including:

	NeuroLearn	NeuroBytes
Dates of Product Delivery	06/2012–09/2018	01/2019–04/2019
Data Collection Period	01/2015–07/2019	01/2019–05/2019
Length	1-2 hours	< 5 minutes
CME certification?	Yes	No
Post-course assessment?	Yes	Yes

Table 1. NeuroLearn launched in 2012 and was further revised in 2016 to meet American Board of Psychiatry and Neurology (ABPN) requirements for CME. A shorter, rapid-update e-Learning Product called NeuroBytes, which does not offer CME, was beta tested from 08/2018–12/2018 and a pilot program ran 01/2019–04/2019.

AIMS: to (1) assess the **usability** of NeuroBytes, (2) describe the **target audience**, (3) examine the **feasibility** by assessing time and cost required for module development, and (4) **evaluate the effectiveness** as an e-Learning educational tool.

NeuroBytes Proposed Curriculum		
Year	Month	Topic
2019	January	Behavioral Neurology, Dementia
	February	Stroke; Palliative Neurology
	March	Neuro-Ophthalmology & Neuro-Otology
	April	General Neurology
	May	Neuroimmunology & MS
	June	Headache Medicine & Sleep Medicine
	July	Sports Neurology
	August	Neuro-Oncology
	September	Neurocritical Care
	October	Neuromuscular Med
	November	Child Neurology
	December	Epilepsy

Table 2. NeuroBytes curriculum breakdown by month.

Methods



Usability: evaluated through course enrollment and module completion rates.



Target Audience: assessed by enrollee member type (e.g. neurologist, resident, student, administrator, etc.).



Feasibility: quantified by cost and time required to design and release a module.



Effectiveness: defined by user satisfaction scores from post-video surveys and self-reported impact on practice.

Results



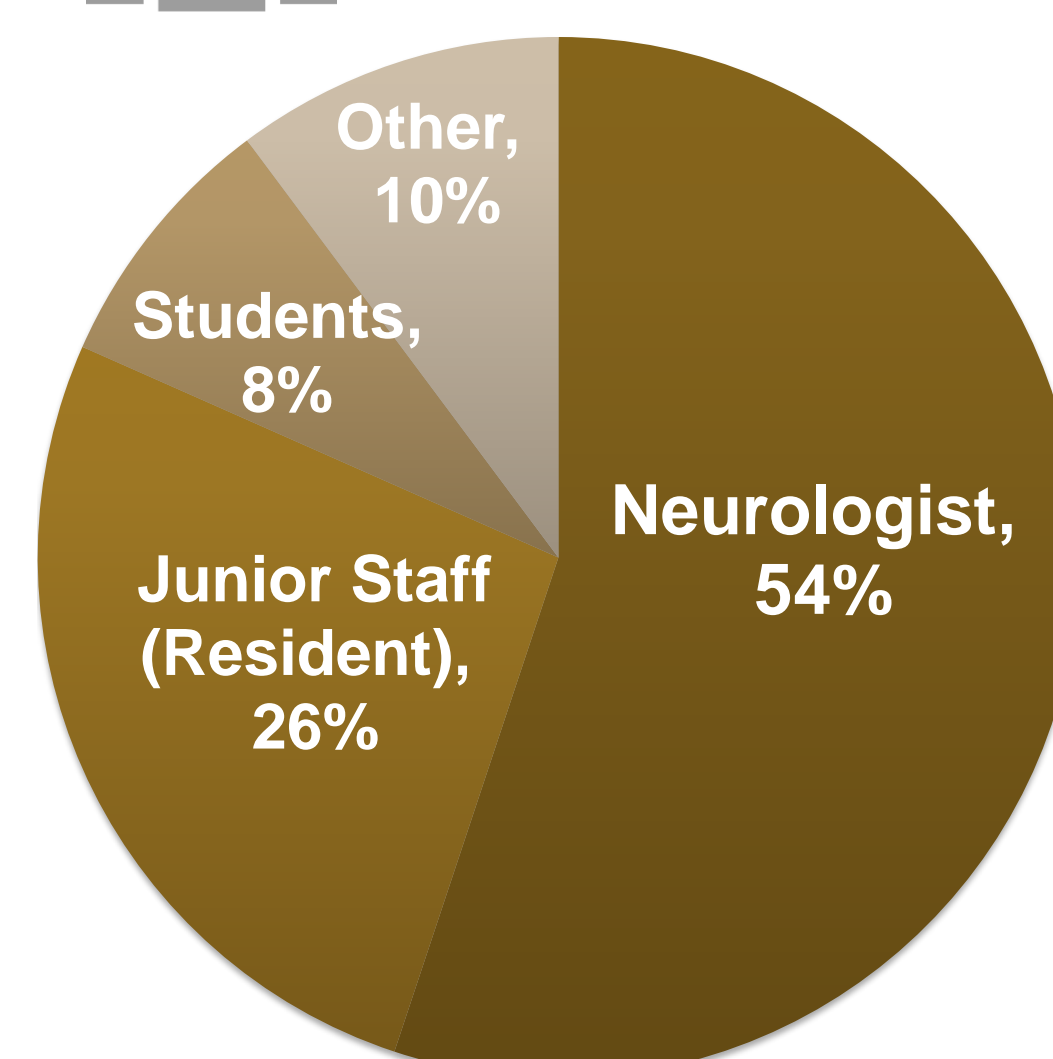
NeuroLearn	NeuroBytes
8,911 enrollments	5,130 enrollments
329 users per module	588 users per module
71% completion	37% completion



NeuroBytes: 59 hours at \$78 per hour

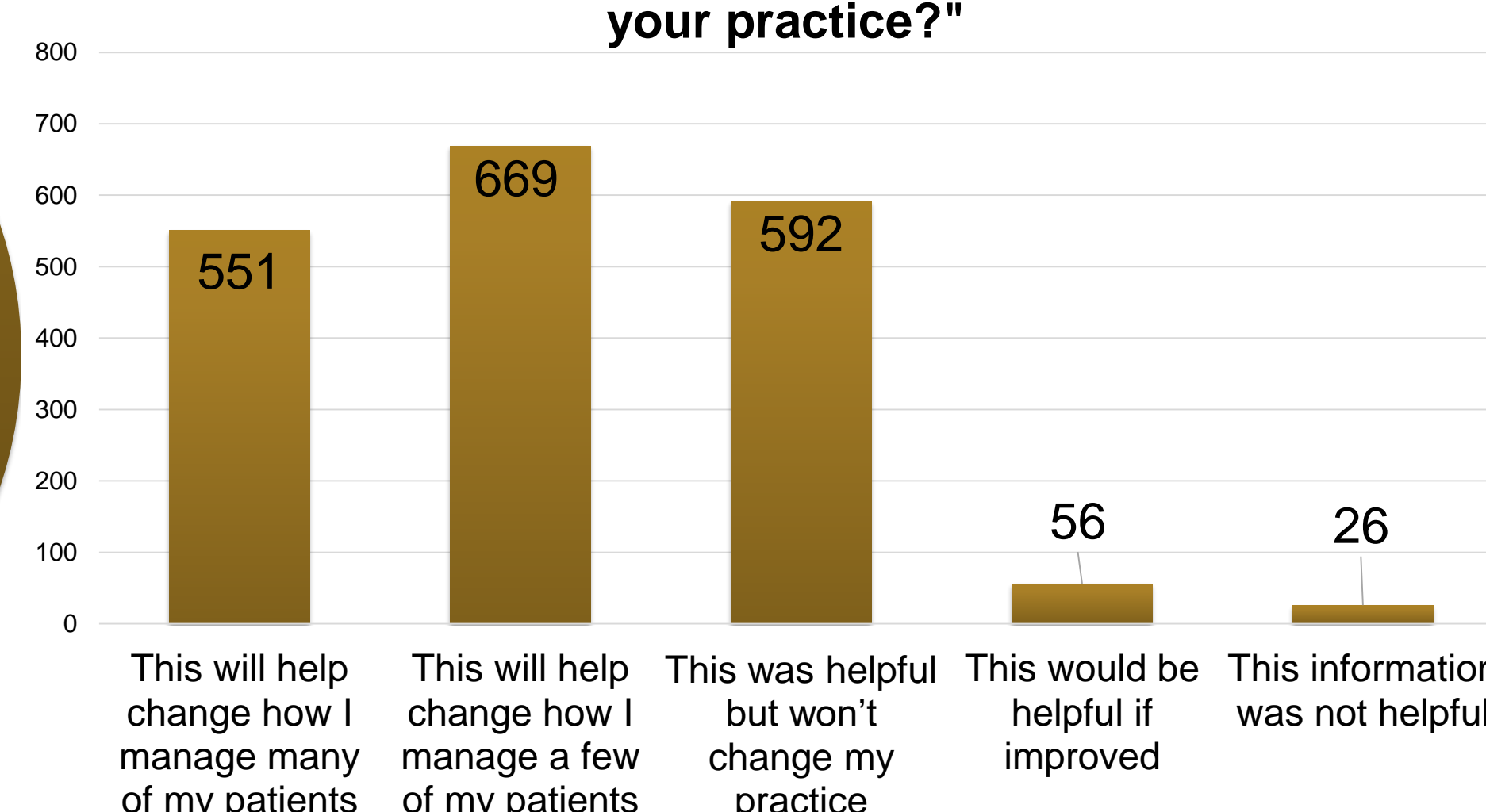


Audience



Effectiveness

"Was the information in NeuroBytes helpful for your practice?"



Discussion

This study has three important findings:

- (1) The cost and time required to develop and disseminate NeuroBytes was feasible and sustainable,
- (2) NeuroBytes appealed to trainees and students more so than the pre-existing CME-offering NeuroLearn,
- (3) While satisfaction was high with NeuroBytes, users were less likely to complete NeuroBytes and reported less direct impact on clinical practice than with the pre-existing NeuroLearn product.



Conclusion

This study shows that using high-yield video modules is likely an effective tool in promoting continuing professional development (CPD) in the ever-evolving field of neurology.

Moving forward, a comprehensive approach to CPD will incorporate benefits of both NeuroBytes and NeuroLearn to provide concise, high-yield information while also impacting the quality of patient care.

References

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2. NeuroBytes. American Academy of Neurology Website. https://learning.aan.com/diweb/catalog/44187?_ga=2.4119600.1892274457.1565777628-1916034814.1558473489. 2019. Accessed June 6, 2019.