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:

<table>
<thead>
<tr>
<th>NeuroLearn</th>
<th>NeuroBytes</th>
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<tbody>
<tr>
<td>Length</td>
<td>&lt; 1 hour</td>
</tr>
<tr>
<td>CME certification?</td>
<td>Yes</td>
</tr>
<tr>
<td>Post-course assessment?</td>
<td>Yes</td>
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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.

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

<table>
<thead>
<tr>
<th>NeuroLearn</th>
<th>NeuroBytes</th>
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<tbody>
<tr>
<td>8,911 enrollments</td>
<td>5,130 enrollments</td>
</tr>
<tr>
<td>329 users per module</td>
<td>588 users per module</td>
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<tr>
<td>71% completion</td>
<td>37% completion</td>
</tr>
</tbody>
</table>

Table 2. NeuroBytes proposed curriculum breakdown by month.

Table 2. NeuroBytes curriculum breakdown by month.

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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