

Chipping away at neurologist burnout, one refill request at a time

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There has been growing awareness of the issue of neurologist burnout over the past several years.^{1,2} Based in part on the results of a national survey in which more than 50% of neurologist respondents had at least one symptom of burnout and in which neurologists had the third highest incidence across specialties, American Academy of Neurology (AAN) leadership now views burnout as a neurologic crisis.¹ A number of factors have been proposed to contribute to neurologist burnout, including loss of professional autonomy, increasing barriers to practicing quality medicine, and increased administrative duties or busywork.^{1,2} Redesign of suboptimal health care processes and workflows may be a critical step in reducing burnout and improving physician well-being.^{1,2} While considerable efforts are being directed toward this problem, including the formation of an AAN task force focused solely on neurologist burnout, there have been few studies examining potential interventions.

In this issue of *Neurology® Clinical Practice*, Zuccarelli and Coffman³ propose an intervention to reduce prescription refill requests made after regular business hours in a pediatric neurology practice. Although at first consideration after-hours refill requests are simply a minor annoyance, it is an issue worthy of attention. Work that during regular business hours would be done primarily by nonphysician staff is now the responsibility of the on-call provider, adding to the busywork of call and possibly to lack of sleep and fatigue, all of which contribute to burnout. Urgent after-hours refill requests, especially those for controlled substances, may take considerable time and effort to address, resulting in a potential delay of care not only to the patient who needs the refill, but also to other patients waiting to be addressed by the on-call provider. As burnout has been associated with poorer patient care,¹ this issue has both direct and indirect patient safety and quality of care implications.³

The use of formal quality improvement techniques ensures that health care process and workflow analysis and redesign is approached in a systematic way, which is especially critical when there are patient safety implications. Zuccarelli and Coffman³ should be commended for utilizing several quality improvement strategies to devise a comprehensive solution to this problem. Specifically mentioned is the use of a fishbone (also known as a cause and effect) diagram, a powerful tool that analyzes the multiple causes that contribute to a particular problem. Also mentioned is the use of a plan-do-study-act (PDSA) worksheet. The PDSA cycle is intended to be a continuous cycle of quality improvement.⁴ The planning stage involves identification of the end result (the goal), along with a plan to achieve this goal and metrics for success.⁴ The “do” step is the actual implementation of the plan, with “study” being the measure and analysis of the outcomes of the intervention. In “act” the plan and, if indicated, the goal is adjusted based on information learned in the prior stages.

While quality improvement methodologies were utilized to design the intervention in this study,³ they do not appear to have been applied fully to the analysis of the results. No

See page XXX

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outcomes in this study were assessed beyond the number of refill requests. Although the statistically significant decrease in after-hours requests is promising, no conclusions can be drawn regarding the actual effect on neurologist burnout as it relates to call responsibilities without the formal assessment of this as an outcome.

More importantly, there are considerable potential patient safety issues inherent in refusing urgent refill requests in a pediatric neurology practice, such as a child potentially running out of an anticonvulsant medication resulting in breakthrough seizures. An intervention of this nature warranted the full use of a continuous quality improvement cycle. Additional data such as breakthrough seizures, emergency room visits, and hospital admissions should be analyzed (the study aspect of the PDSA cycle). If indicated, the intervention should then be adjusted prior to being adopted by other practices. The authors acknowledge that further data collection is indicated.³

Neurologist burnout is a critical and complicated issue with myriad contributing factors that are not yet fully elucidated.^{1,2} The solution to this problem is equally complex, and multiple strategies and interventions are necessary to address it. Thorough analysis and redesign of suboptimal processes and workflows is key. The use of formal quality improvement methodologies will help to ensure that this work is done thoughtfully, without unintended negative patient safety or quality outcomes.

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