

Costs to treat bleeding strokes increases 10 years later

October 23 2014



Micrograph showing cortical pseudolaminar necrosis, a finding seen in strokes on medical imaging and at autopsy. H&E-LFB stain. Credit: Nephron/Wikipedia

Costs to treat strokes caused by bleeding in the brain may increase significantly 10 years later, according to a study in the American Heart Association journal *Stroke*.

The Australian study is the first to include 10 years of follow-up data on

stroke cost estimates, which may also apply to the United States, researchers said.

Generally, expenses associated with a stroke peak within the first year and decline over time. Previous estimates of lifetime [costs](#) in Australia were based on a five-year average and may have underestimated costs, specifically for hemorrhagic (bleeding) strokes.

"Prevention of stroke should be a focus, since the costs of providing care to people who suffer stroke are unlikely to diminish," said Dominique Cadilhac, Ph.D., study senior author and an associate professor and head of the Translational Public Health: Stroke and Ageing Research Centre at Monash University in Victoria, Australia. "Much could be gained if we could work to prevent the majority of strokes that are due to modifiable risk factors, such as high blood pressure or diabetes."

Researchers interviewed 243 ischemic (clot-caused) stroke patients and 43 intracerebral hemorrhage patients who had survived for 10 years or more. The patients had participated in an earlier Australian regional study that estimated five-year costs.

Researchers found that:

- Average annual direct costs for ischemic stroke remained stable between five to 10 years at about \$5,207 in U.S. dollars.
- Average annual direct costs for intracerebral hemorrhage stroke increased 31 percent, from \$5,807 at five years to \$7,607 at 10 years and the overall average lifetime costs per case for intracerebral hemorrhage stroke increased 25 percent, from \$43,786 to \$54,956.
- Medication, aged-care facilities and informal care expenses explained the majority of costs at 10 years. Rehabilitation expenses decreased for ischemic stroke.

"We did not know that the cost differentials would be so great between [ischemic stroke](#) and interebral hemorrhage and that short-term estimates (six-12 months after a first stroke) used to approximate lifetime annual resource use after the first year would not be a good predictor of future costs," said Cadilhac, who is also the head of Public Health and Epidemiology within the Stroke Division of the Florey Institute of Neuroscience and Mental Health and Data Custodian for the Australian Stroke Clinical Registry.

Like America, the Australian healthcare system is funded through public and private [health](#) insurance. However, the way health care is delivered and priced may influence cost differences between the two health systems. For example, if patients in America stay in the hospital longer or are offered different rehabilitation choices to what is available in Australia, estimates may be too low or high.

"We hope that our findings can be used to influence the need for more primary prevention and to also support assessment of the cost effectiveness of interventions to reduce disability from stroke," Cadilhac said. "In addition, ensuring that the best evidenced-based guideline treatment is provided in hospitals will assist in reducing disability associated with [stroke](#) and may, in turn, avoid unnecessary aged-care placements or an undue burden to caregivers."

Provided by American Heart Association

Citation: Costs to treat bleeding strokes increases 10 years later (2014, October 23) retrieved 26 April 2024 from <https://medicalxpress.com/news/2014-10-years.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.