What is this research about?
Stroke is a serious consequence of cerebral vascular disease, disrupting blood flow to the brain. It is the fourth leading cause of death in Canada. Stroke has significant impacts on patients and families with almost 60% of stroke survivors suffering moderate to severe impairment. With a growing elderly population, the incidence of stroke is expected to increase. Understanding these patients and their outcomes is very important.

Many stroke patients require intensive rehabilitation to regain functioning. However, some stroke patients are too frail to tolerate traditional intensive rehabilitation, which involves several hours of therapy daily. These patients could benefit from slow stream or “low tolerance long duration rehabilitation.” Low tolerance long duration rehabilitation consists of up to one hour of therapy a day that spans a longer period of time than usually provided in traditional rehabilitation programs. Without this programme of low intensity therapy, patients unable to tolerate intensive therapy would be discharged to long term care facilities where they have little or no chance of regaining any independence. This article focuses on outcomes for post-acute stroke patients discharged from hospital to low tolerance long duration rehabilitation programs in Ontario complex continuing care (CCC) settings.

What you need to know:
Slow stream rehabilitation therapy such as Ontario’s “low tolerance long duration rehabilitation” is an alternative to traditional intensive rehabilitation. This study described outcomes for patients receiving low tolerance long duration rehabilitation. This slow stream therapy programme was successful in enabling the majority of post-acute stroke patients to be discharged to either independent living or healthcare settings providing less care that in CCC settings. These findings suggest there is benefit to providing less intense therapy for certain individuals.
The purpose of this article was to describe and report on health-related characteristics and outcomes of post-acute stroke patients recovering in CCC settings. Outcomes included: patient satisfaction with care, discharge location, and length of stay within CCC setting.

What did the researchers do?
Researchers conducted a descriptive study of patients in Ontario low tolerance long duration rehabilitation programs recovering from stroke. Eighty-one stroke patients from six CCC settings who received up to five hours of therapy per week were included in the study.

Two sources of data were used. Primary data was collected from patients to evaluate satisfaction with care. Secondary data related to patient characteristics, health status, length of stay, and discharge location were retrieved from routinely collected resident assessment data.

What did the researchers find?
Researchers used descriptive statistics to summarize patient characteristics and outcomes at each CCC setting.

Patient Characteristics
- Overall, the sample of stroke patients was 74 years of age, 59% were female, 51% were married, and 35% lived alone prior to admission.
- The overall health condition of study patients was relatively stable. They were moderately dependent on others and cognitive impairments were mild.

Patient Outcomes
- Nearly half of stroke patients studied were discharged into independent or semi-independent living, 35% to nursing home settings, while 17% remained in CCC or acute care settings.
- The average length of stay for patients was 113 days (ranging from 11 to 181 days). There were significant differences across facilities.
- The mean score for patient satisfaction with care was 71/100 (ranging from 40 to 87).

Overall, patient scores for satisfaction with care did not reflect high levels of satisfaction. Given the physical dependency of these patients, opportunities for improving patient experience exist. These include: improving staff response times when they are called and staff being more effective in understanding patient’s feelings.

How can you use this research?
Without slow stream rehabilitation, post-acute stroke patients who are unable to tolerate traditional rehabilitation therapy would be discharged from acute care hospitals to long-term care facilities. This research can be used to help healthcare leaders, hospitals, and policymakers understand the benefits of this slower-paced and less intense therapy for those who need it. Further, it can be used to inform improvements to post-acute stroke patient satisfaction with care.

Original Article:
To learn more about this study, we invite you to read the original research article:

About the Researcher
Ann Tourangeau is an Associate Professor in the Faculty of Nursing at the University of Toronto, and an adjunct scientist at ICES. tourangeau.research@utoronto.ca

Keywords
Stroke, patient satisfaction, discharge location, length of stay