



Ontario stroke care: A look at data collected using the AlphaFIM® instrument

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Background

The AlphaFIM® instrument¹ is used in Canadian acute care settings to assist with the discharge planning of patients with stroke. In October 2014, the Ontario Ministry of Health and Long-Term Care mandated the collection of projected FIM® motor and cognitive ratings (calculated using the AlphaFIM® instrument) for all acute stroke admissions, as well as the submission of these ratings to CIHI's Discharge Abstract Database (DAD). In addition, all inpatient facilities with designated rehabilitation beds in Ontario are mandated to collect rehabilitation data and submit it to CIHI's National Rehabilitation Reporting System (NRS), which provides the opportunity to examine pathways of care for these patients.

Methods

The cohort included DAD adult discharges from Ontario acute care facilities between October 2014 and March 2017 with a diagnosis of stroke,² specifically those that had valid³ projected function scores coded. Using the total scores (motor + cognitive), episodes of care were grouped into 3 disability categories⁴ (Mild: >80; Moderate: 40–80; and Severe: <40) that are sometimes used as part of discharge planning. This cohort was then linked with NRS episodes to examine who received inpatient rehabilitation within 14 days of the DAD discharge date.

Results

Who are they?

The cohort (n = 25,985) had a mean projected FIM® rating of 70.6 (standard deviation = 32.3) and median of 75 (see Table 1). Category proportions were as follows: Mild: 45%; Moderate: 32%; and Severe: 24%.

Table 1 Demographic characteristics and selected projected FIM® rating statistics

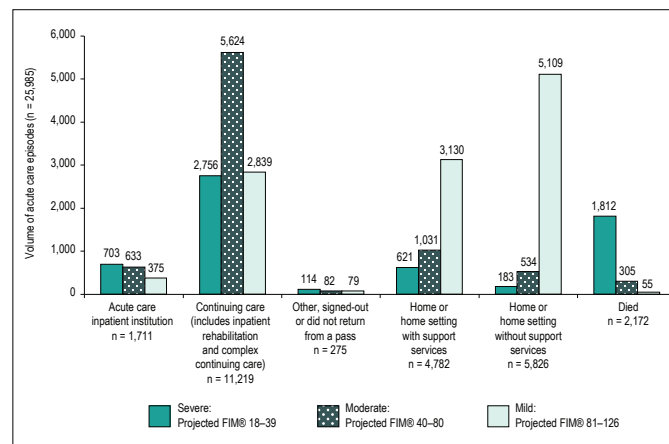
	Female				Male			
	Number	Median	Mean	Standard deviation	Number	Median	Mean	Standard deviation
Younger than 45	464	95	84.0	32.0	518	95	83.0	32.8
45–54	717	90	79.7	32.5	1,135	94	83.7	31.0
55–64	1,475	85	77.5	31.6	2,678	89	80.7	31.2
65–74	2,437	81	74.7	31.2	3,458	85	77.6	31.3
75–84	3,594	68	65.6	31.3	3,657	73	69.3	31.5
85 and older	3,752	50	54.1	28.7	2,100	61	60.3	29.6
All ages	12,439	69	66.8	32.2	13,546	79	74.0	32.0

Source: Discharge Abstract Database, 2014–2015 to 2016–2017, Canadian Institute for Health Information.

Where did they go upon discharge from acute care?

The majority of the Mild group (71%) were discharged home with or without services, while the majority of the Moderate (69%) and Severe (45%) groups were discharged to continuing care (including inpatient rehabilitation and complex continuing care) (see Figure 1).

Figure 1 Acute care discharge disposition by disability category

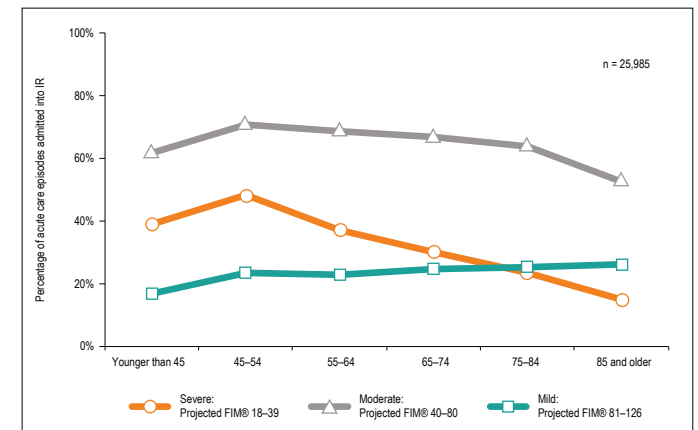


Source: Discharge Abstract Database, 2014–2015 to 2016–2017, Canadian Institute for Health Information.

Who was admitted to inpatient rehabilitation?

Overall, 36% of the cohort were admitted to inpatient rehabilitation within 14 days of discharge (most within the same day) (see Figure 2). Of those, 54% were from the Moderate group, while 30% and 16% were from the Mild and Severe groups, respectively.

Figure 2 Percentage of acute care episodes admitted into inpatient rehabilitation by age group and disability category



Note: IR: Inpatient rehabilitation.

Sources: National Rehabilitation Reporting System and Discharge Abstract Database, 2014–2015 to 2016–2017, Canadian Institute for Health Information.

Discussion

This analysis provides an initial look at a growing source of information about patients' post-stroke activities of daily living function and their subsequent discharge destinations post-acute care.

Future analyses should examine more closely the pathway from acute care to rehabilitation, as well as look at which groups transition (post-acute care and post-rehabilitation) to the community and to complex continuing care.

References

- The AlphaFIM® instrument is an abbreviated version of the FIM® instrument. It is a proprietary outcome measure developed by Uniform Data System for Medical Rehabilitation (UDSMR). AlphaFIM® and FIM® are trademarks of Uniform Data System for Medical Rehabilitation, a division of UB Foundation Activities, Inc.
- Canadian Institute for Health Information. 2016–2017 DAD Abstracting Manual Update Notice. June 2016. https://www.cihi.ca/sites/default/files/document/dad_update_en.pdf.
- Methodological details are available upon request.
- Ontario Stroke Network. *Timely Transfer of Appropriate Patients from Acute Facilities to Rehabilitation: Using the AlphaFIM® Instrument to Support Best Practice in Stroke Care*. November 2015. https://www.strokenetworkseo.ca/sites/strokenetworkseo.ca/files/osn_backgrounder_alphafim_nov_2015_se_version_0.pdf.

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