



# Does the implementation of an e-learning package to medical and nursing staff improve adherence to dysphagia screening?



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**Aim:** 1. Implement an e-learning package to medical and nursing staff 2. Improve adherence to dysphagia screening 3. Screen for dysphagia within 24 hours of stroke diagnosis

**Background:** Dysphagia (swallowing impairment) is present in up to 67% of stroke patients.<sup>1</sup> Clinical practice guidelines recommend screening for dysphagia within 24 hours of stroke or TIA diagnosis, with a national screening benchmark of 67%.<sup>2</sup> The Acute Swallowing Screen in Stroke/TIA (ASSIST) is a widely-used swallowing screen in Australian hospitals, which can be administered by medical and nursing staff to patients in need of formal dysphagia assessment by a speech pathologist.

**Method:** An audit following implementation with standard face-to-face training revealed low use of the ASSIST with stroke patients. Therefore, Cabrini Health speech pathology developed an e-learning package that included a face-to-face competency assessment by speech pathologists. The package is administered via Cabrini's online education system and comprises a pre-test, 7 interactive learning chapters with videos demonstrating various aspects of the ASSIST. It concludes with a post-test, and requires 90% to pass. Eighteen doctors and twenty-seven nurses from the stroke unit and emergency department were invited to participate in the e-learning training and subsequently implement the ASSIST. Data were collected at three time-points (baseline, post standard training, and post e-learning training) via the patient administration system and a medical record audit.

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**Results:** 18 doctors and 27 nurses were invited for e-learning training; 20% of these individuals (9/45) participated and subsequently achieved competency. After face-to-face training, only 8% (7/85) of stroke patients were screened for dysphagia, though a high majority (86%) of these were screened within 24 hours. After e-learning, adherence to dysphagia screening improved to 43% (37/86), and 89% of those screened were screened within 24 hours of diagnosis. However, only 53% of these were completed correctly.

**Conclusions:** We successfully implemented an e-learning package to 9 medical and nursing staff. Data demonstrated that the e-learning package did improve adherence to dysphagia screening. Completion of those screens within 24 hours was improved, as recommended by the 2010 National Stroke Guidelines. However, with only 43% of stroke or TIA patients being screened, the national benchmark of 67% was still not met. It is also uncertain whether the e-learning package itself improved adherence to screening, or whether this is an artefact of the process having been part of the stroke pathway.

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	Baseline	Post standard training	Post e-learning training
Adherence to screening	0%	8%	43%
Completed within 24 hours	N/A	86%	89%
Accuracy of completion	N/A	29%	53%

