

# Dynamic diagnostics: Do videofluoroscopic evaluations change swallowing management at Joondalup Health Campus?

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## Related literature

(3) Brady S, Donzelli J. The modified barium swallow and the functional endoscopic evaluation of swallowing. *Otolaryngol Clin North Am.* 2013 Dec;46(6):1009–22. doi: 10.1016/j.otc.2013.08.001. Epub 2013 Oct 8. PMID: 24262956.

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## Introduction

Videofluoroscopy (VFSS) is a radiological evaluation used for assessment and management of dysphagia. Dysphagia can contribute to complications such as malnutrition, dehydration, aspiration of food and drink and subsequently aspiration pneumonia. Research shows up to 50% of people with dysphagia who aspirate, do so without any signs it is happening(3).

Referral for VFSS is undertaken to objectively assess and manage dysphagia in order to improve health outcomes and mitigate health associated complications of dysphagia, such as increased hospital length of stay.

## OBJECTIVE

To evaluate the clinical value of VFSS, patient access to VFSS, and whether it changes management of patients with dysphagia at Joondalup Health Campus (JHC).

## METHODOLOGY

103 adult inpatient files audited retrospectively



## The audit considered 6 variables:

- Did VFSS result in a change of dysphagia severity status rating?
- Did VFSS result in a change of mode of nutrition?
- Did VFSS result in a change in diet texture/fluid consistency recommendations?
- Did VFSS result in implementation of strategies that improved swallow function for the patient?
- Did VFSS result in recommendations for dysphagia rehab?
- Did VFSS result in referral to another health professional/Specialist?

## Results

Patients presented with a wide variety of diagnoses including stroke 14.6%, and respiratory dysfunction 25.3% for example

VFSS lead to a change in diet/fluid recommendations in 49% of patients

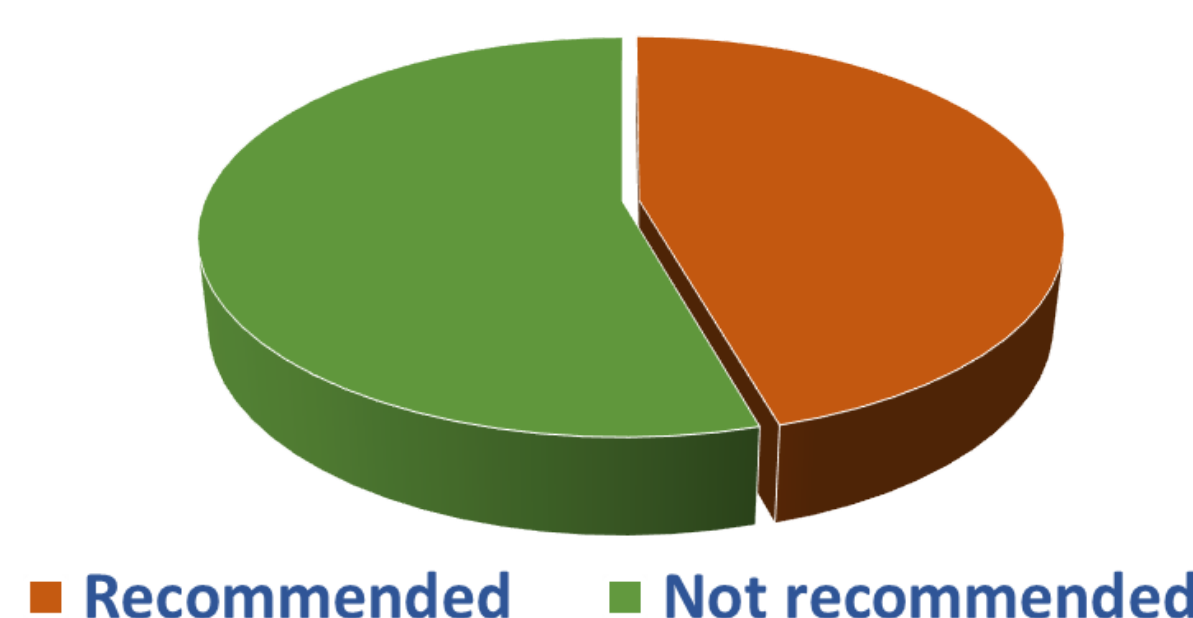
In 29% of patients, change represented improvement in diet/fluid recommendations

Compensatory strategies to improve swallow function were trialled in 73% of patients – with positive improvement diet/fluid management for 31% of patients.

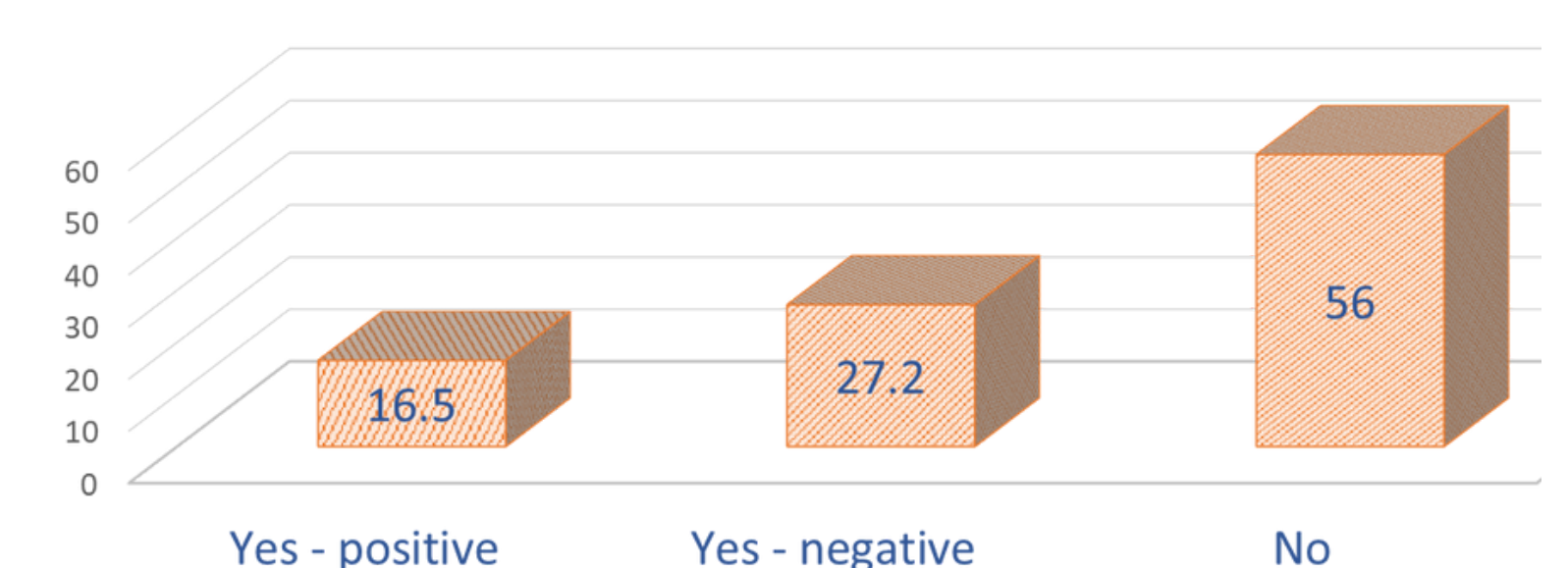
In 4% of patients, VFSS resulted in a management change of being able to eat and drink via mouth to a recommendation of nil by mouth.

44.7% of VFSS's were undertaken within 1 day of referral.

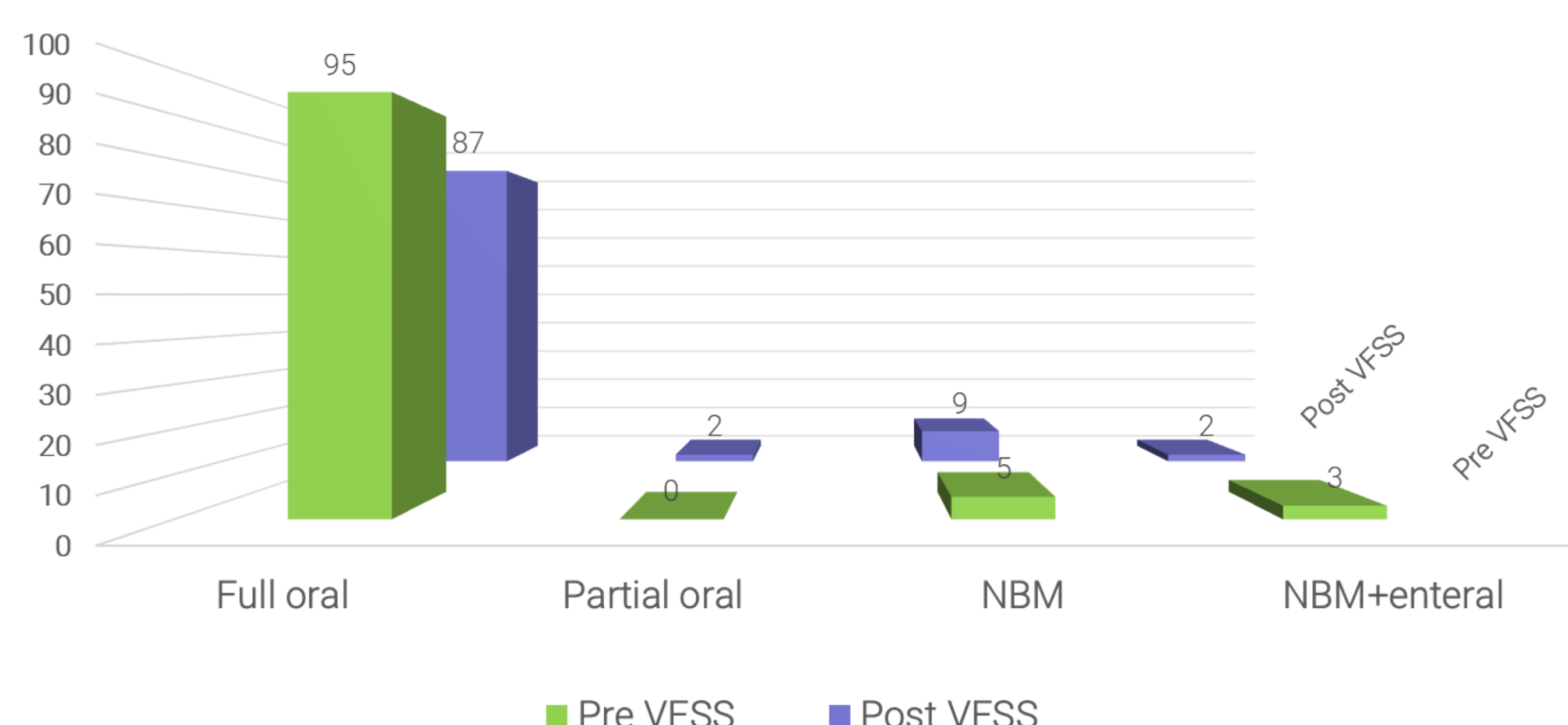
% OF PATIENTS RECOMMENDED FOR DYSPHAGIA REHAB POST VFSS



CHANGE IN SEVERITY SCORE POST VFSS (%)



Nutritional status pre and post VFSS



## Conclusion

VFSS resulted in a change of at least one variable in 78% of patients, representing some change in management of patients with dysphagia post VFSS at JHC. Although the changes were not all of statistical significance, changes in diet/fluid for some patients potentially represented improvement in quality of life.

Results support the ongoing use of VFSS at JHC as an adjunct to the clinical swallow evaluation for certain patients.

Further studies would benefit from examining specific patient diagnostic presentations to examine the clinical utility of VFSS evaluations in more detail.