



An Audit of a Micronutrient Screening and Supplementation Protocol in patients post oesophagogastric surgery in a National Oesophageal and Gastric Centre

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INTRODUCTION

Oesophagogastric resection has a profound impact on nutritional status. A previous review by the Nutrition and Survivorship Clinic for oesophageal cancer patients in St James's Hospital, found a high prevalence of iron deficiency (50%) and vitamin D deficiency (47%) in patients at 24 months post-surgery. Accordingly, a micronutrient screening and supplementation protocol was developed to check nutrition bloods at 12 months post-surgery, followed by treatment of identified deficiencies at 15 months and recommended follow up care.

AIM

The aim of this audit was to evaluate compliance of the Upper GI team with the micronutrient screening and supplementation protocol. A secondary aim was to raise awareness of this important protocol and initiate an education program.

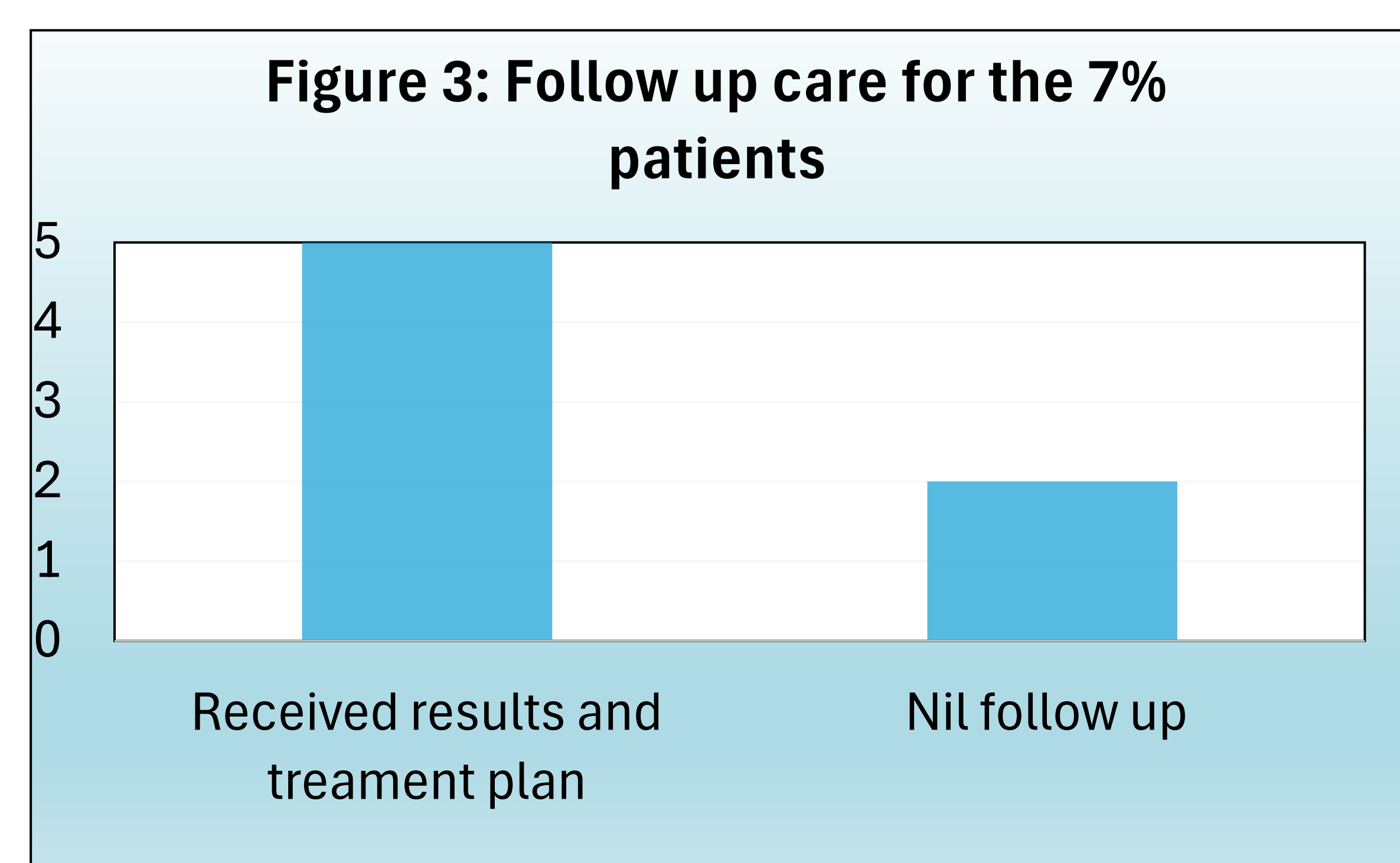
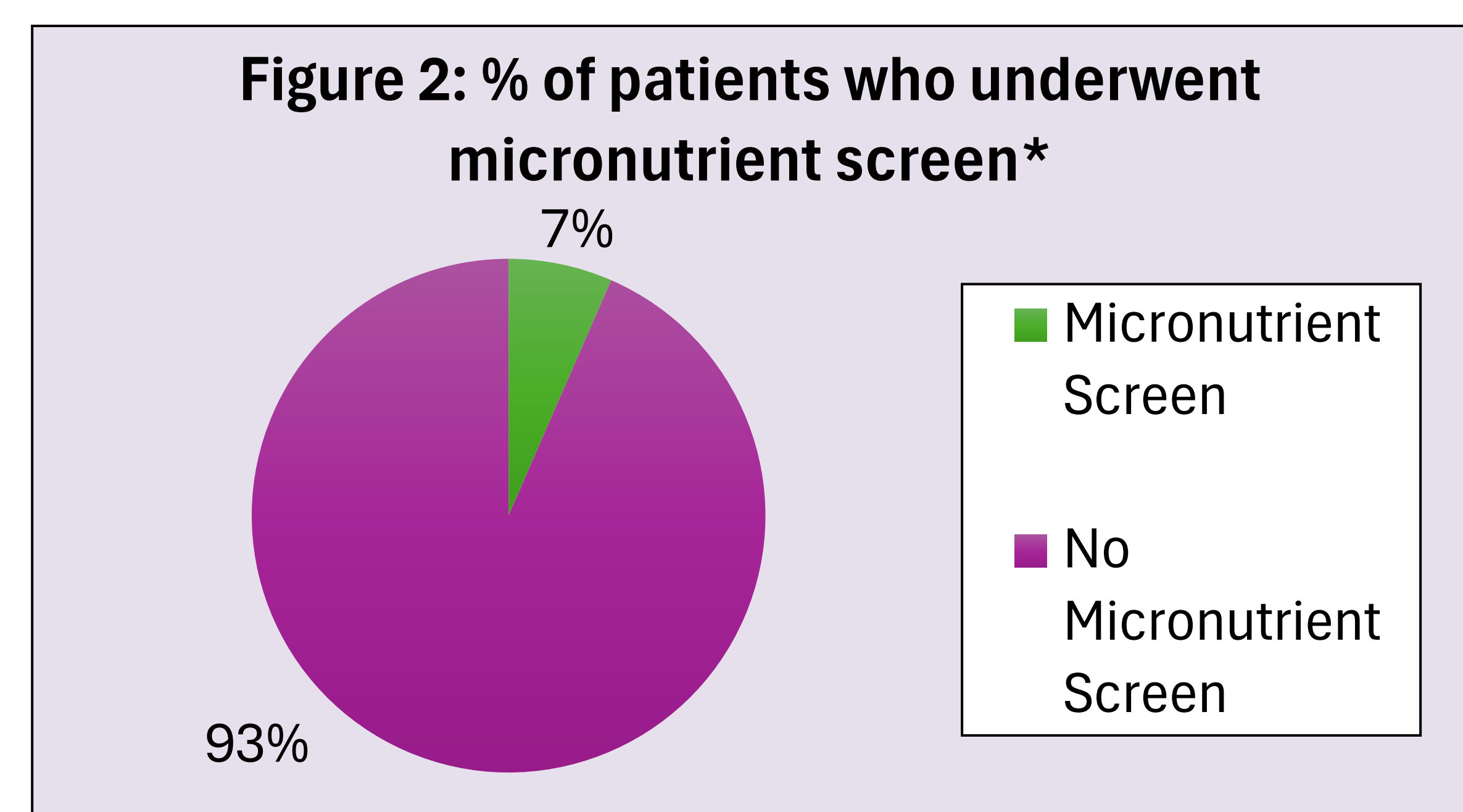
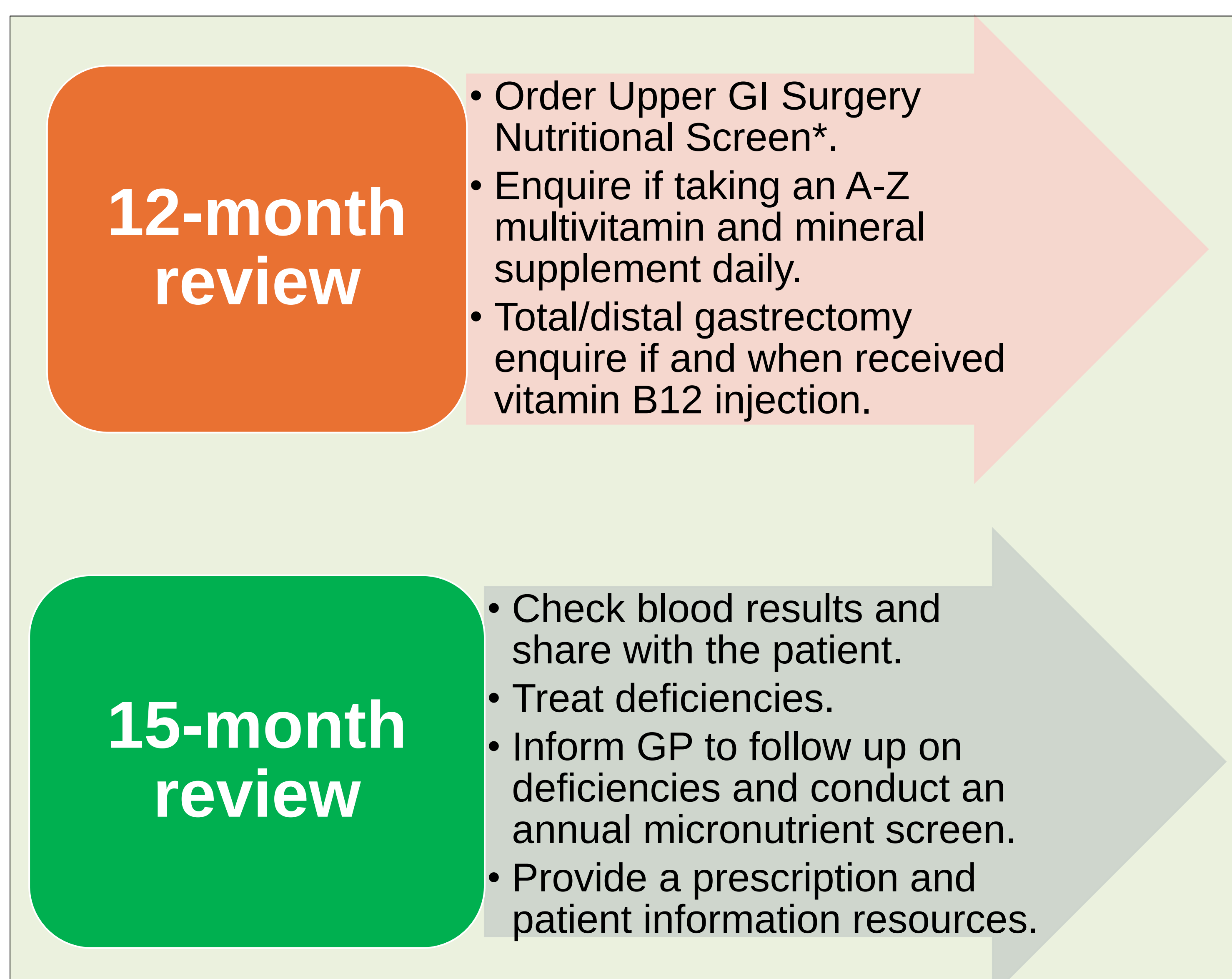
METHODS

Data was collected retrospectively from the electronic patient record on 188 consecutive patients who underwent oesophagogastric resection between January 2021 and December 2022 inclusive.

RESULTS

59% (n=107) of patients attended their 12-month review. An Upper GI Surgery Nutritional Screen* (renal profile, liver profile, bone profile, full blood count, haematinics, CRP, iron studies and vitamin D) was ordered in just n=7 cases. The importance of taking a daily multivitamin and mineral supplement was documented in n=12 cases. Only n=5 patients post distal or total gastrectomy were asked if they received their vitamin b12 injection. 45% (n=84) of patients attended their 15-month review. n=5 patients who had undergone a micronutrient screen* received results and a treatment plan. Recommendation to the GP for annual micronutrient screen (full blood count, haematinics, iron studies and vitamin D) was documented in n=6 cases.

Figure 1: Protocol for micronutrient screening and supplementation



CONCLUSION

Overall compliance with the micronutrient protocol was poor. This is likely due to the protocol's recent introduction, NCHD rotations, dietetic staffing deficits and COVID-19 related workflow disruptions. Recommendations include a multidisciplinary team education program, improved protocol accessibility, and patient education and empowerment. To complete the audit cycle, a re-audit is planned for May 2025. Future work will incorporate bone health, reviewing the benefit of including vitamin A, vitamin E, zinc and copper in this protocol and development of a standard micronutrient prescription.