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Australian and New Zealand Head and Neck Cancer Society (ANZHNCS) Position Statement on the Importance of Maintaining Surgical Guides and Biomodels on the Prostheses List (PL)

The Australian and New Zealand Head and Neck Cancer Society (ANZHNCS) is the peak multidisciplinary body representing clinicians involved in the care of patients with head and neck cancer. Our members include surgeons, radiation oncologists, medical oncologists, dentists, prosthodontists, speech pathologists, allied health professionals, and researchers dedicated to improving outcomes for patients with head and neck malignancies.

ANZHNCS together with the overwhelming support of head and neck surgical leaders from across Australia, strongly advocates for maintaining surgical guides and biomodels on the Prostheses List (PL). These technologies have become the new standard of care for patients undergoing complex maxillo-mandibular reconstruction following surgery to remove benign or malignant tumours, or due to sequalae of osteoradionecrosis (ORN).

Key Points for Maintaining Surgical Guides and Biomodels:

1. Current Standard of Care

Over the past decade, surgical guides and biomodels, integrated within virtual surgical planning (VSP), have become essential for reconstructive surgery of the maxillomandibular complex. Their use significantly enhances surgical precision, reduces operative time, and improves clinical outcomes, making them indispensable to modern head and neck cancer care (Hanasono et al., 2013; Roser et al., 2010; Wilde et al., 2015).

2. Clinical Effectiveness and Patient Outcomes

The precise reconstruction facilitated by surgical guides and biomodels directly results in improved functional outcomes such as better speech, chewing, swallowing, and aesthetic appearance. These technologies significantly enhance patient quality of life post-surgery, enabling earlier recovery which leads to earlier return to work and more complete



rehabilitation (Modabber et al., 2014; Alwadeai et al., 2024;Bolzoni et al., 2022).

3. Recognition by Clinical Experts

The importance and clinical effectiveness of surgical guides and biomodels are widely recognised and supported by the the majority of surgeons involved with head and neck cancer treatment in Australia as reflected by their signatories below. The paucity of Level 1 evidence (RCTs) primarily stems from the relatively recent adoption of these advanced technologies; nonetheless, substantial real-world observational evidence and clinical experience unequivocally demonstrate their value and effectiveness.

4. Impact on Public Health Systems

Removing surgical guides and biomodels from the PL would lead to increased out-of-pocket costs for private patients, likely driving patients away from private healthcare into the public system. This shift would exacerbate the existing pressures on public hospitals, significantly increasing waitlists, resource allocation demands, and the overall burden on public healthcare services.

Recommendations to the Department

- Retain the current arrangement of provision of surgical guides and biomodels on the Prostheses List to uphold the current standard of care.
- Implement targeted reimbursement based on procedural complexity to ensure equitable and sustainable access.
- Continue proactive engagement with ANZHNCS and clinical experts when formulating policies impacting the delivery of head and neck cancer care.

Conclusion

ANZHNCS and the broader head and neck surgical community strongly advocate for maintaining surgical guides and biomodels on the Prostheses List. This is essential for preserving the current high standards of clinical care, patient quality of life, and overall healthcare efficiency in managing complex maxillo-mandibular reconstructions.

This position statement has received support from heads of surgical departments involved with the treatment of head and neck cancer patients across major Australian hospitals, highlighting unified and expert consensus on maintaining these critical devices on the Prostheses List.

Signatories Supporting this Statement

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- 7. A/Prof Tim Iseli Director of ENT Otolaryngology Head and Neck Surgery Unit, Royal Melbourne Hospital
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- 12. **Prof Eng Ooi** Director, ENT Otolaryngology Head and Neck Surgery Unit, Flinders Medical Centre
- 13. **Dr Fraser Gilmour** Director, Plastic and Reconstructive Surgical Unit, Barwon Health, Geelong
- 14. Prof Ben Dixon Director, ENT, Head & Neck Surgery, St Vincent's Hospital Melbourne; Garnett Passe and Rodney Williams Professor of Otolaryngology Head & Neck Surgery, University of Melbourne
- 15. **Dr Ken Wan** –Director of Oral and Maxillofacial Surgery Dept, Fiona Stanley Hospital Perth
- 16. **Dr Julia Crawford** Head of Department, ENT Otolaryngology Head and Neck Surgery Unit, St Vincent's Hospital Sydney
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- 18. **Dr Sally Ng** Clinical Lead in Head and Neck Reconstruction, Plastic Surgery Unit, Austin Hospital, Melbourne
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