Are We Missing Melanoma Follow-Up? Surveillance Adherence in a Rural Primary Care Cohort

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INTRODUCTION

- Melanoma poses a significant burden in Aotearoa New Zealand[1], with high recurrence risk requiring long-term skin surveillance
- Although national guidelines recommend staged-based follow-up, adherence in rural primary care is unclear
- This study aims to evaluate skin surveillance adherence in a rural general practice

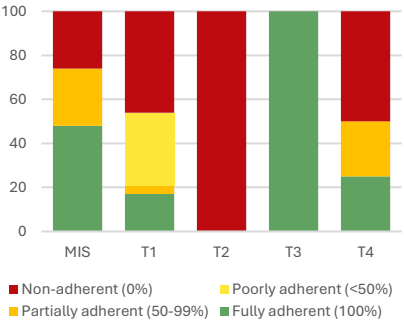
METHODS

- Retrospective review on patients with melanoma or melanoma in situ (MIS) between 1999 and 2025 at a rural Taranaki General Practice
- Histology and follow-up documentation were analysed
- Adherence was defined as the proportion of documented skin checks based on melanoma stage and time since diagnosis relative to MelNet recommendation (Figure 1)
- This was categorised as fully (100%), partially (50-99%), poorly (<50%) or non-adherent (0%)

Figure 1. MelNet recommended follow-up protocols

MELANOMA STAGE	RECOMMENDED FOLLOW-UP PROTOCOLS
Melanoma-in-situ	Biennial skin checks for 10 years
Stage IA	Annual skin checks for 10 years
Stage IB, IIA	6 monthly skin checks for 2 years, then annually until 10th year
Stage IB and above with no SNB	6 monthly US of draining node fields for 2 years
Stage IIB-IIC, IIIA-D	4 monthly skin checks for 2 years, 6 monthly in third year, and annually thereafter until 10th year
Stage IV	As stage III, with additional visits as per clinical requirements

RESULTS



- Fifty-seven patients were included (23 MIS; 34 invasive)
- Among MIS patients, 48% were fully adherent and 26% partially adherent to follow-up protocols
- Adherence declined in early invasive disease: only 17% of T1 (n=24) patients were fully adherent, and none with T2 (n=5) met recommendations. Both T3 patients and one of four T4 patients were fully adherent
- Clinically significant findings during follow-up included new primary melanomas (n=3) and a late recurrence (n=1)
- No consistent association was observed between socioeconomic deprivation quintile and adherence

DISCUSSION

This audit reveals a counterintuitive pattern: patients with early invasive disease were least likely to meet follow-up recommendations. While 48% of MIS patients were fully adherent, this dropped sharply to 17% in T1 and 0% in T2, a "low-risk paradox" whereby lower perceived threat reduces surveillance engagement. Conversely, both T3 patients and one T4 patient were fully adherent, likely reflecting greater specialist involvement and heightened illness perception. Two non-adherent T4 patients were receiving active systemic therapy, suggesting oncological treatment burden may displace routine dermatological follow-up. Clinically significant findings detected during surveillance, including new primary melanomas and a late T4 recurrence, underscore the consequences of these gaps. No consistent association was observed between socioeconomic deprivation and adherence, possibly reflecting the cohort's homogeneous rural profile or limited statistical power. Rural-specific barriers including restricted dermatologist access, transportation challenges, and unclear provider responsibility likely compound non-adherence, particularly where follow-up remains patient-initiated.

REFERENCES

1. Gordon LG, Leung W, Johns R, McNoe B, Lindsay D, Merollini KMD, et al. Estimated Healthcare Costs of Melanoma and Keratinocyte Skin Cancers in Australia and Aotearoa New Zealand in 2021. Int J Environ Res Public Health 2022;19(6):3178.