

Melanoma in Gippsland

'Using Data to Drive Service Development'

Caroline Lasry¹ Kashif Sheikh¹ Stewart Harper¹ Mahesh Iddawela^{1,3} Zafar Zafar² Neil Jayasuriya³

¹ Gippsland Regional Integrated Cancer Services, Traralgon, Victoria, Australia

² Latrobe Medical Centre, Traralgon, Victoria, Australia

³ Latrobe Regional Health, Traralgon, Victoria, Australia

BACKGROUND

Access to high quality cancer care closer to home is one of the priorities of the Victorian Cancer Plan¹ and a key component to a quality public health system. Integrated primary care data and hospital information on patient care is essential for developing efficient pathways and optimising clinical care and outcomes closer to home. Furthermore, the Melanoma Optimal Care Summit² identified that a significant number of melanoma patients are travelling outside the Gippsland region to access melanoma treatment available to them at local health services within Gippsland.

AIMS

- Compare rates of Gippsland melanoma patients undergoing melanoma surgery at public health services within Gippsland as opposed to those undergoing care outside Gippsland.
- Identify referral pathways and patient flow to determine patient leakage of Gippsland melanoma patients undergoing care outside Gippsland.
- Establish a collaborative and cooperative partnership between the Gippsland PHN and Gippsland Regional Integrated Cancer Services (GRICS).

METHODS

GRICS partnered with Gippsland PHN to acquire primary health data for comparison with public health service data for the 2018-2020 period.

- Primary health dataset: Population Level Analytics and Reporting (POLAR)³ incorporating 80% of Gippsland general practices;
- Public health datasets: Victorian Admitted Episodes Dataset (VAED)⁴; Victorian Cancer Registry (VCR)⁵;
- Data for residents of Gippsland postcodes was analysed for the 2018 to 2020 period only.

RESULTS

Variation in Gippsland melanoma statistics was observed across the three data sets (Figure 1). The VCR reported 600 new incidences of melanoma in Gippsland, whereas the POLAR data indicated 991 new diagnoses of melanoma. Analysis of the VAED revealed 238 Gippsland residents had their *first melanoma cancer admission* state-wide, where 57 (24%) of those were in Gippsland as opposed to 181 (76%) outside of Gippsland.

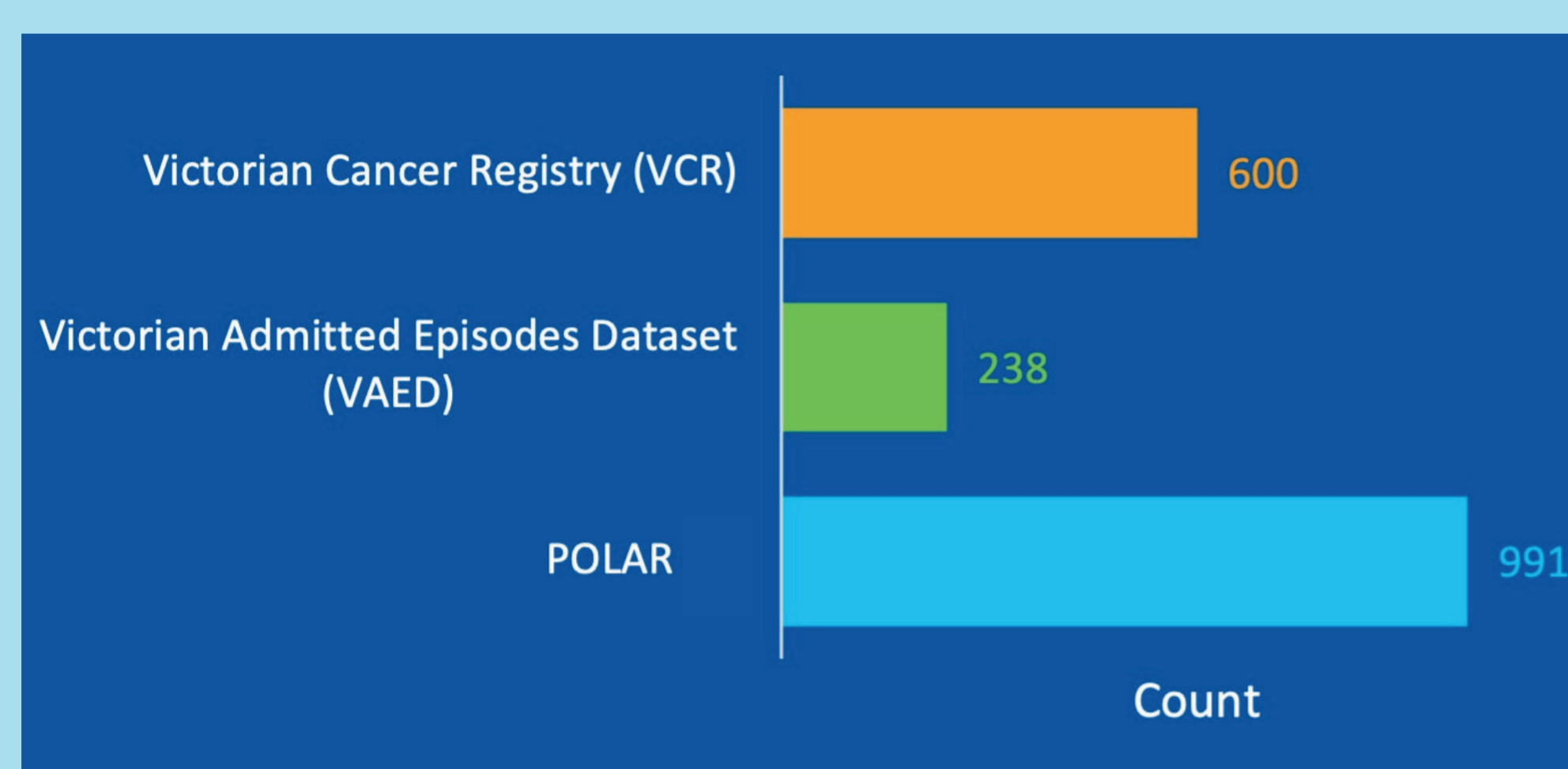


Figure 1. Comparative analysis - Melanoma statistics for Gippsland residents 2018-2020.^{3,4,5}

Additionally, regardless of *cancer admission number*, the VAED indicated 782 Gippsland patients and 2836 admissions were assigned a malignant melanoma diagnosis code (ICD-10 AM code 'C43')

when calculated by calendar year. Of those, only 35% of patients and 41% of admissions were treated within Gippsland (Figure 2).

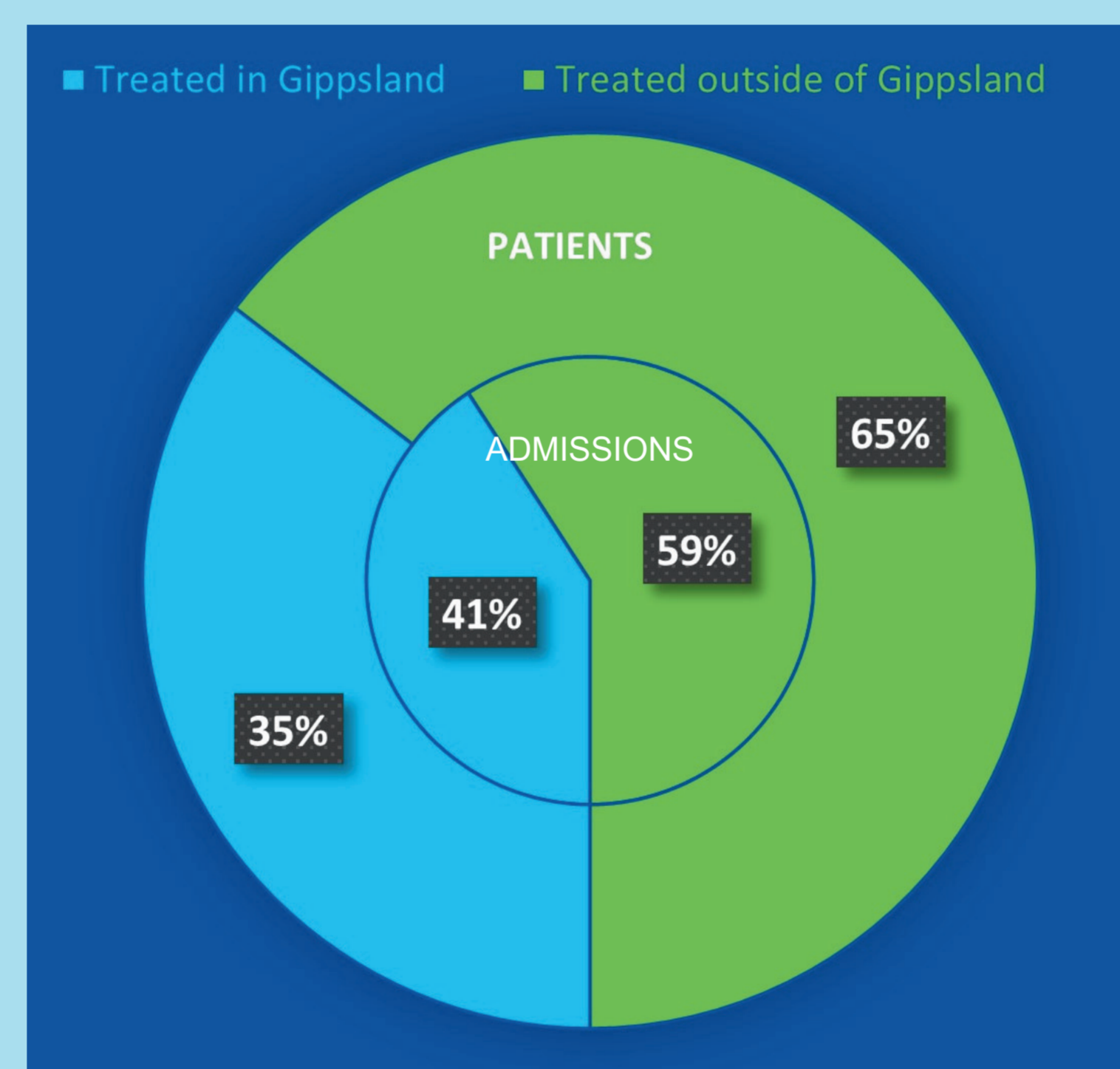


Figure 2. Comparative analysis - Patients (n=782) vs. Admissions (n=2836) for Gippsland residents assigned ICD-10 AM code C43 (melanoma) during treatment in vs. outside of Gippsland 2018-2020.⁴

The VAED also indicated only 21% of melanoma surgical and biopsy procedures were performed in Gippsland where 22% of those were surgical and

13% biopsy procedures (Figure 3). Further analysis of the VAED revealed 135 'biopsy of lymphatic structure' being performed at state-wide health services, where 17 (13%) were performed in Gippsland as opposed to 118 (87%) outside of Gippsland.

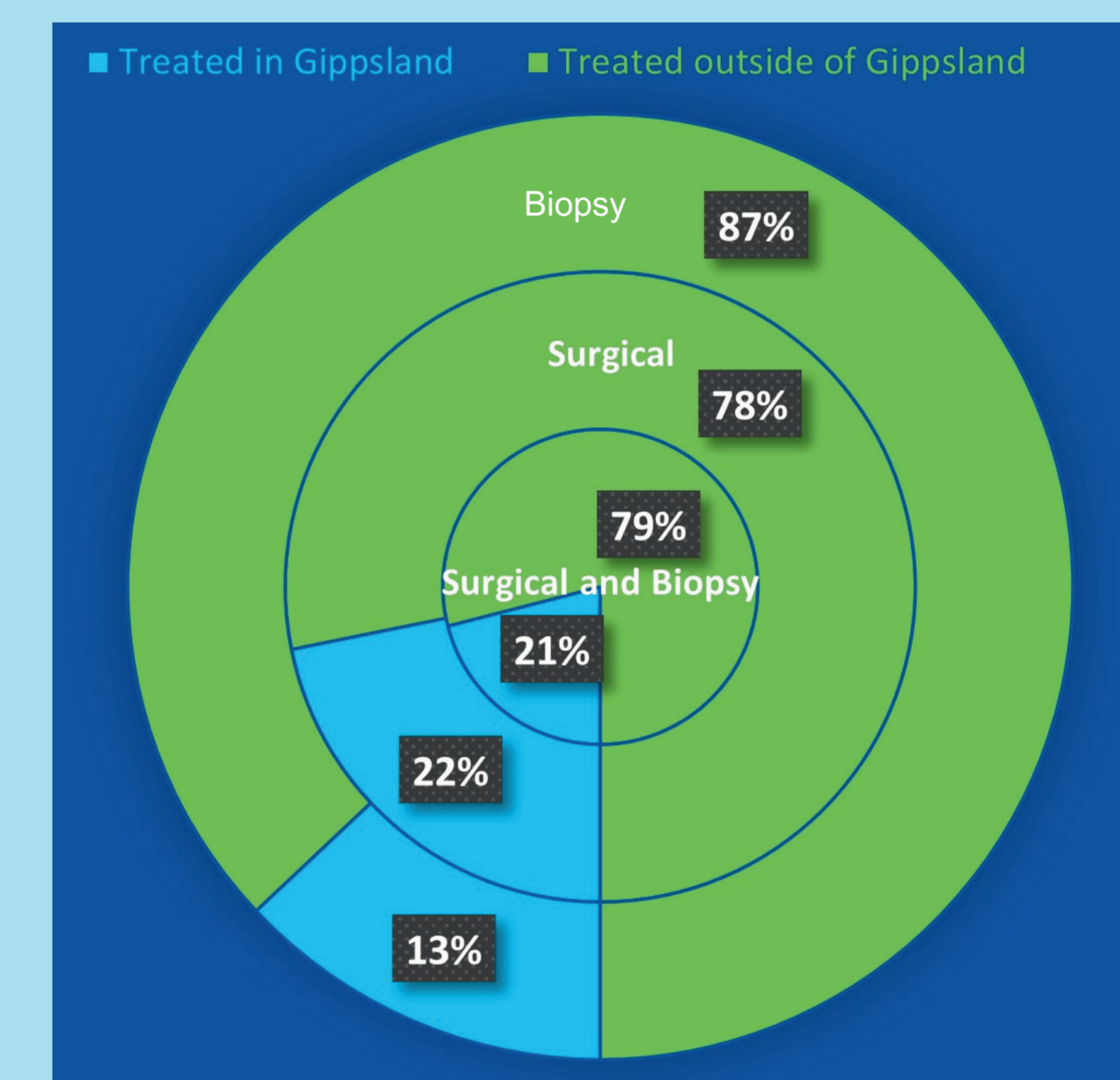


Figure 3. Comparative analysis - Melanoma (C43) related biopsy (n=208) and surgical (n=2026) procedures performed for Gippsland residents during treatment in vs. outside of Gippsland 2018-2020.⁴

CONCLUSION

This study demonstrates that there is variation in health data being captured in primary versus tertiary care settings and collaboration between organisations helps data teams to take a systems-thinking approach and assists decision makers in service planning. Despite these variations, this study confirms that there is significant leakage of Gippsland Melanoma patients seeking diagnostic and surgical treatment outside of Gippsland which could be provided locally.

A larger research project is now planned utilising this information to establish melanoma referral pathways, models of care and services to develop best pathways for diagnoses and procedures to localise diagnostic and surgical care for Gippsland melanoma patients. Furthermore, by establishing a collaborative partnership between GRICS and Gippsland PHN, there is an increased interest for partnership on future projects.

REFERENCES

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