



# Australian and New Zealand Surgeons' Attitudes to our Role in Climate Change Mitigation

On behalf of the RACS Environmental Sustainability in Surgical Practice Working Party  
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## Background

- Over 250,000 deaths occur each year secondary to climate change<sup>1</sup>.
- The Australian healthcare system contributes to 7% of Australia's carbon footprint<sup>2</sup>
- Operating theatres contribute to 30% of a hospital waste<sup>3</sup>
- We need to understand the attitudes and current practices of surgeons in order to devise strategies for reduction of carbon emissions in the operating theatre
- No survey to date has surveyed Australian surgeons on their attitudes to climate change

## Methods

- An electronic, cross sectional survey was distributed to RACS members via the RACS newsletter and electronic magazine
- Data was collected for 107 days
- Reflexive, inductive thematic analysis was applied to qualitative data

## Results

253 eligible responses

78.7% of respondents 'almost always/often' make personal choices outside of work to reduce their carbon footprint

72% of respondents 'strongly agreed/agreed' that climate change is an urgent public health crisis

## RACS has a role to play..

Over 60% Respondents Strongly Agreed/ Agreed that RACS should:

- Support and fund research into low carbon treatment pathways for surgical patients (69%)
- Commit to being carbon neutral before 2030 (64.2%)
- Advocate for stronger state and federal emissions targets (63.2%)

Over 70% Respondents Strongly Agreed/ Agreed that RACS should:

- Encourage the surgical device industry to become carbon neutral (75.3%)
- Provide guidance and education to surgeons on the most carbon-efficient approaches to patient care (73.2%)
- Advocate for environmental sustainability in health policy and strategy (70.8%)

Advocacy and Education and Research were frequently identified as the most important actions RACS can take to counteract climate change in free text responses

## If guidelines are provided, more surgeons will adapt environmentally sustainable behaviours

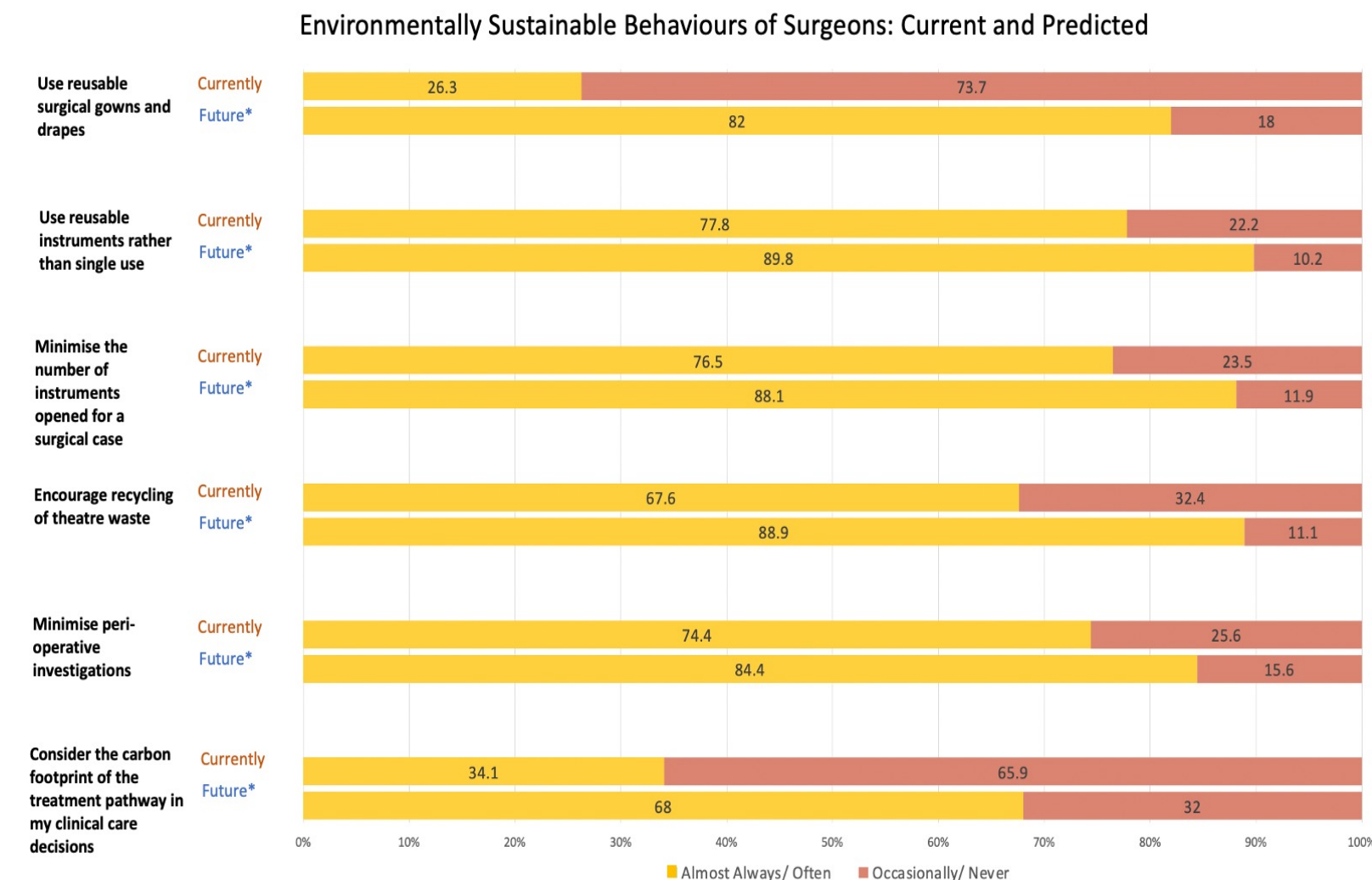


Figure 1: Environmentally Sustainable Behaviours of Surgeons: Current and Predicted. Horizontal bars and overlying numerical values represent the percentage of surgeons that indicate they currently, or in future will 'Almost Always/ Often' or 'Occasionally/ Never' perform the behaviour listed on the vertical axis. \*Future behaviours reflect how surgeons predict they would act 'if provided with supporting evidence/ guidelines'. N= 245 -248.

## Conclusion

- RACS member are calling on RACS to provide research, organisational guidelines and policy on the environmental impact of surgical practice in Australia and New Zealand
- RACS members are calling on the surgical device industry to provide reusable and recyclable products, perform life cycle analysis of their products and fund research on carbon emissions from surgery
- Environmentally sustainable behaviours in surgical practice will be adapted by more RACS members if evidence based guidelines are provided

## Industry has a role to play..

Over 65% of respondents 'Strongly Agreed/ Agreed that the Surgical Device Industry Should:

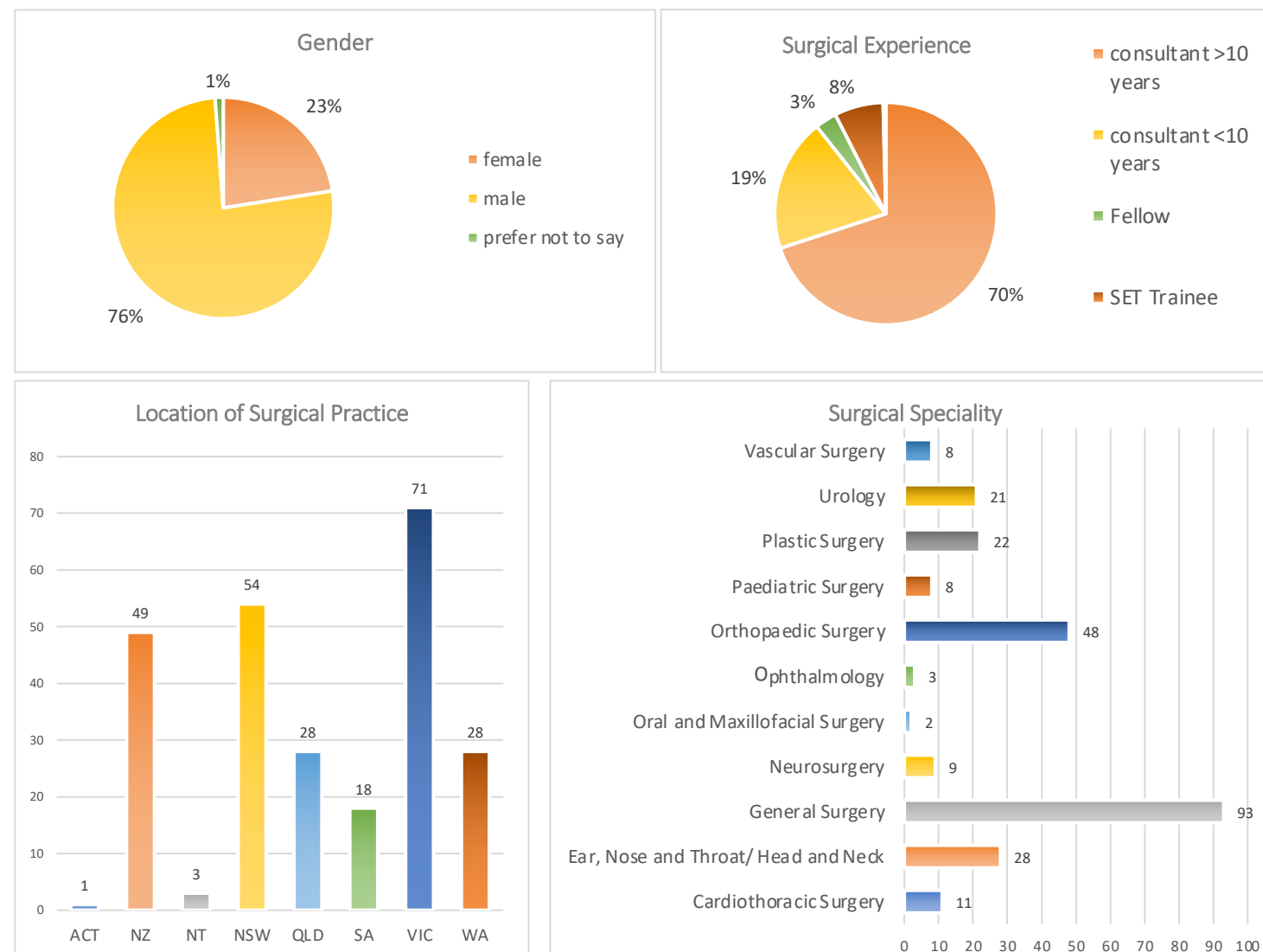
- Provide data on the carbon emissions associated with the production of each product (69.9%)
- Fund research into low carbon emission products (73.5%)

Over 85% of respondents 'Strongly Agreed/ Agreed that the Surgical Device Industry Should:

- provide reusable versions of all existing products (91.1%)
- provide recycling options (87.9%)

Reusable and Recyclable products were identified as the most important action industry can take on the issue of climate change in free text responses

## Demographics



## References

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- Kagoma YK, Stall N, Rubinstein E, Naudie D. People, planet and profits: the case for greening operating rooms. *CMAJ*. 2012;184(17):1905-1911.