

## **Appendix**

This appendix was part of the submitted manuscript and has been peer reviewed. It is posted as supplied by the authors.

### **Additional files**

**File name:** Additional file 1 – Supplementary material

**Description of data:** Additional results not shown in the main article.

**File name:** Additional file 2 – STROBE Statement checklist

**Description of data:** Checklist that outlines how the article was written in accordance with the STROBE Statement.

## **Additional file 1 – Supplementary material**

**Intensive care specialists' knowledge, attitudes and practice relating to the law about withholding and withdrawing life-sustaining treatment: a cross-sectional study comparing intensive care with other specialties involved in end-of-life decision-making**

## Comparison of AMPCo and study samples

AMPCo provided marginal distributions by gender, age and main specialty for each state, based on the information in the AMPCo database for the selected specialties. The numbers of questionnaires sent to each specialty group were also recorded. We could not calculate exact response rates by each characteristic as responses could not be linked to the individual doctors selected. It is also possible that variable values differed in the AMPCo records and study questionnaire responses. Table S1 shows the marginal distributions of state, gender, age and specialty for the original sample from the AMPCo database and the study responses.

**Table S1: Comparison of AMPCo database and study sample by state, gender, age and main specialty**

Characteristic	Total Surveyed	Total Responses
	N = 2858 n (%) AMPCo	N = 867 n (%) Study
<b>State and Gender</b>		
Queensland Males	461 (72)	148 (68)
Females	175 (28)	69 (32)
NSW Males	814 (66)	221 (66)
Females	420 (34)	114 (34)
Victoria Males	655 (66)	198 (63)
Females	333 (34)	115 (37)
Missing gender	0	2
<b>Age</b>		
Less than 40 years	827 (29)	177 (20)
40 to 49 years	1047 (37)	336 (39)
50 to 59 years	568 (20)	219 (25)
60 years or older	266 ( 9)	117 (13)
Missing age	150 ( 5)	18 ( 2)
<b>Main Specialty</b>		
Emergency Medicine	1147 (40)	270 (31)
Geriatric Medicine	253 ( 9)	107 (12)
Intensive Care	428 (15)	125 (14)
Medical Oncology	338 (12)	80 ( 9)
Palliative Care	105 ( 4)	52 ( 6)
Renal Medicine	253 ( 9)	80 ( 9)
Respiratory Medicine	334 (12)	98 (11)
Missing specialty	0	55 (6)

## Additional file 2 – STROBE Statement checklist

### Intensive care specialists’ knowledge, attitudes and practice relating to the law about withholding and withdrawing life-sustaining treatment: a cross-sectional study comparing intensive care with other specialties involved in end-of-life decision-making

STROBE Statement—Checklist of items that should be included in reports of *cross-sectional studies*

Item No	Recommendation
<b>Title and abstract</b>	<p>1 (a) Indicate the study’s design with a commonly used term in the title or the abstract</p> <p>See page 1 (Title page)</p> <hr/> <p>(b) Provide in the abstract an informative and balanced summary of what was done and what was found</p> <p>See pages 2-3 (Abstract)</p>
<b>Introduction</b>	
Background/rationale	<p>2 Explain the scientific background and rationale for the investigation being reported</p> <p>See page 4-5. End-of-life decision-making is an integral part of intensive care (IC) practice, particularly for adults who lack capacity. There are legal frameworks that govern these decisions and this means that Intensivists have not only a clinical role but a legal role as well. Yet there is evidence that medical specialists generally (including Intensivists) lack legal knowledge. This paper examines Intensivists’ attitudes, knowledge and practice in relation to law that deals with withholding and withdrawing life-sustaining treatment (WWLST) for adults who lack capacity, and compares them with other specialists.</p>
Objectives	<p>3 State specific objectives, including any prespecified hypotheses</p> <p>See page 5. The objectives of this study were to examine Intensivists’ attitudes, knowledge and practice in relation to law that deals with WWLST for adults who lack capacity. Our central hypothesis was that despite making these decisions often, there would be gaps in Intensivists’ legal knowledge in this area.</p>
<b>Methods</b>	
Study design	<p>4 Present key elements of study design early in the paper</p> <p>See pages 5-6</p>
Setting	<p>5 Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection</p> <p>See pages 5-6</p>
Participants	<p>6 (a) Give the eligibility criteria, and the sources and methods of selection of participants</p> <p>See pages 5-6</p>
Variables	<p>7 Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable</p> <p>See pages 7-8</p>

Data sources/ measurement	8*	For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group
		See pages 7-8
Bias	9	Describe any efforts to address potential sources of bias
		We considered the possibility that those responding to our survey may not be representative of the wider sample of doctors. For example, those more interested in law may have been more likely to participate. We were also conscious of possible non-response bias due to our response rate. To ascertain the representativeness of our sample we compared it with the original AMPCo sample (by age, gender, specialty, and state) and found that respondents were similar on most comparison variables except that there were fewer younger doctors among respondents than in the sample population (see page 9 and Table S1).
Study size	10	Explain how the study size was arrived at
		The study sample comprised all eligible doctors in the relevant specialties in the three target states who were on the AMPCo database (see pages 5-6).
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why
		See page 7-8. Quantitative variables were treated as continuous and not grouped, except for the knowledge score which was categorised as below 4 or 4 and above.
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding
		See page 8 where this is described under “Statistical analysis”. Regression models (linear or logistic) were used to control for confounding by state, with adjustment made for multiple comparisons.
		(b) Describe any methods used to examine subgroups and interactions
		No subgroup analyses or tests of interaction were undertaken.
		(c) Explain how missing data were addressed
		Fifty-five respondents did not indicate their main specialty, or indicated a specialty outside the designated groups, and they were excluded from the analysis as we were comparing Intensivists with other specialties. There were only relatively small amounts of other missing data, so no adjustments were made for this. Information on missing items is included in the tables.
		(d) If applicable, describe analytical methods taking account of sampling strategy
		The regression models include variables state and specialty which defined the sample strata.
		(e) Describe any sensitivity analyses
		No sensitivity analyses were undertaken.
<b>Results</b>		
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed
		See page 9 detailing response rates. All respondents in the denominator population were included in analyses.

(b) Give reasons for non-participation at each stage.

The main study only had one stage. The study was conducted as an anonymous questionnaire survey and the research team had no contact details to allow follow-up. Although technically it would have been possible for AMPCo to follow-up non-responders about reasons for non-participation, this could have seemed like harassment. Therefore we did not explore reasons for non-participation so cannot give these reasons.

(c) Consider use of a flow diagram

Not applicable.

Descriptive data	14*	<p>(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders</p> <p>Demographic information on age, gender, specialty, and state of study participants is available in Table S1.</p> <p>(b) Indicate number of participants with missing data for each variable of interest</p> <p>See 12c above.</p>
Outcome data	15*	<p>Report numbers of outcome events or summary measures</p> <p>Pages 9-11 report on the key measures for this component of the study: perspectives on law; knowledge of law; and practice and experience with WWLST decisions and law.</p>
Main results	16	<p>(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included.</p> <p>Unadjusted estimates have been given in the paper, with adjustment for state being used to calculate P-values for significance. Adjustment for state made little difference to the effect estimates.</p> <p>(b) Report category boundaries when continuous variables were categorized</p> <p>See 11 above.</p> <p>(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period</p> <p>Not applicable.</p>
Other analyses	17	<p>Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses</p> <p>Not applicable – see 12 (b).</p>
<b>Discussion</b>		
Key results	18	<p>Summarise key results with reference to study objectives</p> <p>See page 11.</p>
Limitations	19	<p>Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias</p> <p>See pages 13-14.</p>
Interpretation	20	<p>Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence</p> <p>See pages 12-14.</p>

Generalisability 21 Discuss the generalisability (external validity) of the study results

See pages 13-14.

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**Other information**

Funding 22 Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based

See "Acknowledgements" on page 16.

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\*Give information separately for exposed and unexposed groups.

**Note:** An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at <http://www.plosmedicine.org/>, Annals of Internal Medicine at <http://www.annals.org/>, and Epidemiology at <http://www.epidem.com/>). Information on the STROBE Initiative is available at [www.strobe-statement.org](http://www.strobe-statement.org).