



Council of Ambulance Authorities –  
Patient Satisfaction Survey Results  
2009



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date of issue:  
27 July 2009



## EXECUTIVE SUMMARY

This report details the service quality and satisfaction ratings of ambulance service patients across Australia and New Zealand, measured in 2009. The purpose of this research is to measure the quality of the ambulance service, as perceived by its customers, and to compare these ratings across ambulance service providers, as well as over the years. The research has run since 2002 in Australia and 2008 in New Zealand. Previously, findings for Ambulance Victoria's metropolitan and rural services were reported individually. Due to the amalgamation of these services in 2009, an overall result for Victoria is now included in addition to the separate metropolitan/rural results. Because this is the first year in which this approach is taken, the combined Victoria results are not compared across years but provide a benchmark for doing so in future reports.

### **Key Findings**

Overall, service quality and satisfaction ratings were very high and consistent across patient segments.

The table below presents combined scores for all states in Australia across all the service dimensions measured. The results are presented as the proportion of customers who were 'very dissatisfied' or 'dissatisfied' (column 2), 'neither satisfied, nor dissatisfied' (column 3), and 'satisfied' or 'very satisfied' (column 4). Also, comparison with 2008 results for proportion of 'satisfied' or 'very satisfied' customers is provided in column 5.

Service Dimensions	Very dissatisfied or dissatisfied (%)	Neither satisfied, nor dissatisfied, (%)	Satisfied or very satisfied, (%)		Change
			2009	2008	
Call response time	1	1	98	98	↔
Treatment satisfaction	1	1	98	98	↔
Paramedics care	1	1	98	98	↔
Communication staff assistance	1	2	97	98	↓
Overall satisfaction (II)	1	2	97#	98	↓
Paramedics satisfaction (III)	1	3	96##	96	↔
Ambulance arrival time (IV)	2	3	95###	95	↔
Trip/ride satisfaction (IV)	2	4	94###	93	↑

# - This sign indicates dimensions for which scores differ significantly from others, based on the number of satisfied customers.

↔↑↓ - These signs indicate change in the results over the period of 2008-2009 ( $p < 0.05$ ).

Satisfaction scores across Australia were very high, and relatively stable compared to the results of the 2008 study. Three dimensions showed a significant change in satisfaction scores between 2008 and 2009. There was an improvement in scores for 'Trip/ride satisfaction' from 93% to 94% 'satisfied or very satisfied' respondents. Conversely, scores for 'Communication staff assistance' and 'Overall

satisfaction' fell slightly from 98% to 97% 'satisfied or very satisfied' respondents. Although no individual patient segments experienced a decline in 'Overall satisfaction' scores, this nationwide decrease is likely function of slightly lower scores for QLD and VIC that were not significant on the state level due to sample size. As in 2008, scores for 'Ambulance arrival time' and 'Trip/ride satisfaction' were significantly lower than for all other dimensions.

More detailed comparison between the states' scores and the results of the 2008 research, as well as with New Zealand results, is provided in the report (where possible).

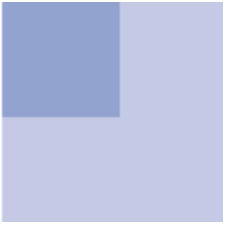
Results from New Zealand are presented below. Comparison is made between New Zealand scores for 2009 and 2008 as well as with the combined scores for all states in Australia in 2009.

Service Dimensions	Very dissatisfied or dissatisfied (%)	Neither satisfied, nor dissatisfied (%)	Satisfied or very satisfied (%)		Change	Comparison to Australian results
			2009	2008		
Treatment satisfaction	1	0	99	98	↑	↑
Paramedics care	1	0	99	99	↔	↑
Call response time	1	1	98	99	↔	↔
Communication staff assistance	1	1	98	96	↑	↔
Paramedics satisfaction	0	2	98	97	↔	↑
Overall satisfaction (II)	2	0	98#	97	↔	↔
Ambulance arrival time (III)	2	4	94##	96	↔	↔
Trip/ride satisfaction (III)	3	4	93##	92	↔	↔

*# - This sign indicates dimensions for which scores differ significantly from others, based on the number of satisfied customers.*

*↔↑ - These signs indicate change in the results over the period of 2008-2009 and comparison with combined Australian results ( $p < 0.05$ ).*

Similar to the scores for Australia, New Zealand overall satisfaction scores were very high. Two dimensions showed increases in scores from 2008. These were 'Treatment satisfaction', which improved from 98% to 99% 'satisfied or very satisfied' respondents, and 'Communication staff assistance' which improved from 96% to 98% 'satisfied or very satisfied' respondents. Similar to the Australian results, 'Ambulance arrival time' and 'Trip/ride satisfaction' scores were lower than for all other dimensions. However, in 2009 the New Zealand ambulance service outperformed the Australian services on three dimensions; 'Treatment satisfaction', 'Paramedics Care' and 'Paramedics satisfaction'. These differences were not driven by any demographic differences between the samples of the two countries.



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## RESEARCH OBJECTIVES & METHODOLOGY

The key purpose of the Patient Satisfaction Mailout survey is to track perceived service quality and customer satisfaction scores across the state-based patient market segments in Australia and New Zealand. Previous studies conducted in Australia annually from 2002 to 2007, and in both Australia and New Zealand in 2008, provide benchmarks against which the 2009 results are now compared. Due to the amalgamation of Victoria's metropolitan and rural ambulance services, an overall result for Victoria is incorporated into the 2009 study. The overall result for Victoria is weighted by incident numbers as approximately 75% of incidents and patients are located in the metropolitan area. As this is the first inclusion of the state as a whole into this study, comparison cannot be made with previous years. However, findings continue also to be reported separately for rural and metropolitan areas of Victoria and these are compared to 2008 results.

### *The Sample*

The data was collected by each ambulance service, using the same core questionnaire. New Zealand data was collected by St John New Zealand, who provides ambulance services for approximately 85% of the New Zealand population. The individual service providers then sent the data to the Council of Ambulance Authorities, where results were combined and reported on by the Ehrenberg-Bass Institute.

The Ehrenberg-Bass Institute for Marketing Science (formerly the Marketing Science Centre), as an independent research body, draws together in this report the results from the Australian states and New Zealand, and discusses any differences between patient segments as well as comparisons with previous year results, where possible.

Similarly to the previous studies, in 2009, nine Australian state-based patient segments and the New Zealand patient segment were included in the sample. In addition, results from Victoria metro and Victoria rural were combined to give an overall result for Victoria. The eleven segments included overall were:

1. South Australia;
2. Western Australia;
3. Northern Territory;
4. New South Wales;
5. Australian Capital Territory;
6. Tasmania;
7. Victoria overall;
8. Victoria metro;
9. Victoria rural;

10. Queensland;
11. New Zealand.

### ***The Instrument***

A universal service quality and satisfaction measurement instrument was developed by the Council of Ambulance Authorities (CAA) working group, in consultation with the Ehrenberg-Bass Institute and was used in all patient segments.

Across all patient segments, three service and five satisfaction (including overall satisfaction) ratings were obtained, as well as four patient profile questions. All service quality rating questions used 5-point Likert scales, where a higher number indicates better perceived performance.

### ***Non-response***

Each state was responsible for the mailing, collection and data entry of its patient survey.

It is understood that the overall patient populations for the different states are approximately:

1. NSW = 952,318
2. QLD = 651,299
3. VIC = 642,692
4. SA = 217,459
5. WA = 182,029
6. TAS = 49,619
7. NT = 29,964
8. ACT = 27,275
9. NZ = 281,292

**Table 1: Response rates by patient segment (2008 survey)**

<b>Ambulance service</b>	<b>Sent</b>	<b>Received</b>	<b>Response rate (%)</b>
VIC – rural	1,300	641	49
SA	1,300	613	47
QLD	1,300	571	44
TAS	1,590	689	43
VIC – metropolitan	1,300	480	37
NSW	1,300	467	36
ACT	2,081	744	36
WA	1,300	444	34
NT	1,300	202	16
<i>Total Australia</i>	12,771	4,851	38
NZ	1,300	437	34
<i>Total</i>	14,071	5,288	38

The response rate achieved in Australia in 2009 was 38%, similar to the response rates in 2007 and 2008 (around 36-38%). The response rate for Australia and New Zealand combined was also 38%. The low response rate for NT (16%) is consistent with the response rate they achieved in previous studies (around 18-20%). Such low response rate leads to the likelihood of non-response bias in their results and less accuracy when comparing with the other states and over time.

### ***Approach to analysis***

The data was collected, entered and cleaned state by state and then pooled and converted to SPSS for analysis by the Ehrenberg-Bass Institute researchers. For each patient segment, descriptive statistics were used to produce the proportion of people who were 'very dissatisfied' or 'dissatisfied', 'neither satisfied nor dissatisfied', and 'satisfied' or 'very satisfied' for the various satisfaction and service quality attributes. 'Unsure' and 'not applicable' responses are not included and the responses to these were generally low.

In all the tables, state ambulance services are listed in a descending order according to the proportion of their customers who said that they were 'satisfied' or 'very satisfied' with a certain element or service.

However, in some cases differences in scores between states are not statistically significant (i.e. arose from random sampling fluctuation) which means that, regardless of the order, all states can be considered equal in performance.

There are also demographic factors that could drive the differences in figures. For example, patients are more likely to provide higher scores for call response time and ambulance arrival time than carers or relatives (when they complete the questionnaire on behalf of patients). This pattern is obvious because many patients are unable to judge the response time accurately when they need urgent medical help. Based on such patterns, a state that appears to have higher proportion of carers than other states could acquire a lower percentage for call response time and ambulance arrival time. So the differences in performance may be attributable to these demographic 'biases' rather than real differences between two equivalent populations. These differences are reported in the 'Respondents' profile' section, by state.

To control for these factors, additional analyses were conducted to test the statistical significance of the difference for dissimilar groups of respondents (based on their demographic profile) within the data for each patient segment.

The respondents profile (% of patient and relatives or carers who completed the survey, gender and age distribution and usage level) was similar to the 2003, 2004, 2005, 2006, 2007 and 2008 profiles, which allows for direct and unbiased comparison between the studies.

Where the difference between states is statistically and meaningfully significant the score is marked with the sign (#) and in front of the state name there is a rank (or place) that the state achieved according to its performance. (I) Indicates a better result than (II), (II) is better than (III) and so on.

Comparison with the 2008 results is provided for all states (excluding Victoria overall), based on the percentage of customers who were 'very satisfied/satisfied' with each of the dimensions. The last column in each table indicates a change over the time (↔ - stable result, ↑ - increase, ↓ - decrease).

## FINDINGS

### Call Response Time

Respondents were asked about their perception of the time taken to answer their emergency call.

**Table 2: Call response time satisfaction ratings (Q2)**

Ambulance service	Very dissatisfied or dissatisfied (%)	Neither satisfied, nor dissatisfied (%)	Satisfied or very satisfied, (%)		Change
			2009	2008	
NSW	1	0	99	97	↑
SA	0	1	99	99	↔
WA	0	1	99	99	↔
TAS	1	1	98	99	↔
VIC	0	2	98	n/a	n/a
QLD (II)	1	2	97#	98	↔
ACT (II)	1	2	97#	99	↓
NT (II)	3	1	96#	95	↔
Total Australia	1	1	98	98	↔
NZ	1	1	98	99	↔
VIC – metropolitan	0	2	98	98	↔
VIC – rural	0	2	98	98	↔

\* *The states are listed in descending order according to the number of very satisfied and satisfied customers they have in 2009.*

# - *This sign indicates states that differ significantly from the leaders, based on the number of satisfied customers ( $p < 0.05$ ).*

↔↑↓ - *These signs indicate change in the results over the period of 2008-2009 ( $p < 0.05$ ).*

Results for all patient segments, except for QLD, ACT and NT, lie within the same range, so their level of performance is perceived as very high and equal. On average across Australia, 98% of respondents were 'very satisfied' or 'satisfied' with the call response time. This was equal to the 2008 result.

The proportion of New Zealand respondents who were 'very satisfied' or 'satisfied' with the call response time was equal to the average Australian result, and was also statistically equal to the scores of leading Australian states.

The low scores for NT and ACT could be explained by characteristics of the patients in these samples. Compared with other states, ACT had higher proportions of patients who have been transported only once, and of survey participants who were carers or relatives, and these groups of people tend to provide more critical evaluations. Similarly, NT had a substantially higher proportion of younger patients than other states and younger patients usually give lower scores. There were no demographic characteristics to explain the lower score of QLD compared with other states.

Compared to the results from 2008, most Australian states' scores were consistent over time. One exception was NSW, whose score increased from 97% to 99%. NSW therefore joined the best-ranked group of states, whereas in 2008 it scored significantly lower than that group. There were no demographic differences from last year that would explain this difference in scores, meaning it reflects real changes. Conversely, ACT's score decreased from 99% to 97% and although it was among the best-ranked states in 2008, it scored significantly lower than that group in this study. This decrease may be attributable to changes in the demographic profile of ACT patients. In 2009, ACT had a higher proportion of patients transported only once compared with 2008. As mentioned above, these groups tend to provide more critical evaluations.

## Satisfaction with Communication Staff Assistance

Respondents were then asked about their level of satisfaction with the operator they spoke to when called for ambulance.

**Table 3: Communication staff assistance satisfaction ratings (Q3)**

Ambulance Service	Very dissatisfied or dissatisfied (%)	Neither satisfied, nor dissatisfied (%)	Satisfied or very satisfied, (%)		Change
			2009	2008	
VIC	0	1	99	n/a	n/a
QLD	1	1	98	98	↔
SA	1	1	98	98	↔
TAS	1	1	98	99	↓
WA	2	1	97	97	↔
NT	1	2	97	93	↑
NSW (II)	0	3	97#	96	↔
ACT (II)	2	3	95#	97	↓
Total Australia	1	2	97	98	↓
NZ	1	1	98	96	↑
VIC – metropolitan	0	1	99	98	↔
VIC – rural	1	1	98	97	↔

\* *The states are listed in descending order according to the number of very satisfied and satisfied customers they have in 2009.*

# *- This sign indicates states that differ significantly from the leaders, based on the number of satisfied customers ( $p < 0.05$ ).*

↔ ↑ ↓ *- These signs indicate change in the results over the period of 2008-2009 ( $p < 0.05$ ).*

The average score across Australia for communication staff assistance was relatively high (in total 97% were very satisfied or satisfied) and equal to the NZ result. However, the average Australian score fell significantly from the 2008 score of 98%. Although scores for the majority of patient segments were stable compared to 2008 results, several did change over time. Scores improved for NT (93% to 97%) and NZ (96% to 98%). There were no demographic differences between the years to explain these variations, so they reflect real changes. On the other hand, scores decreased for Tasmania (99% to 98%) and ACT (97% to 95%). Compared with 2008, ACT had a higher proportion of young or middle-aged patients, who generally give lower ratings. There were however no demographic changes over the last year to explain the decline in Tasmania's score, indicating that this was a real change.

Compared to 2008 results, there was a lesser degree of separation between patient segment performances. All states performed equally well, with the exception of NSW and ACT who achieved significantly lower perceived levels of performance on this dimension. WA, SA, NZ and Victoria (rural), who in 2008 were among the group of second-best rated states, this year moved to join QLD, Tasmania and Victoria (overall) as the best performing states. NT's significantly improved score also moved it from being the single worst performing state in 2008 to among the best in 2009.

A low ACT result for communication staff assistance satisfaction might be driven by a higher proportion of young or middle-aged patients (who generally give lower ratings) compared with other states.

There were however no demographic characteristics of the NSW sample to explain its slightly lower score compared with other states.

## Ambulance Response Time

Respondents were asked to rate the response time of the ambulance.

**Table 4: Response time of ambulance arrival satisfaction ratings (Q4)**

Ambulance Service	Very dissatisfied or dissatisfied (%)	Neither satisfied, nor dissatisfied (%)	Satisfied or very satisfied, (%)		Change
			2009	2008	
SA	0	2	98	98	↔
NSW (II)	2	3	95#	94	↔
WA (II)	2	3	95#	95	↔
VIC (II)	2	3	95#	n/a	n/a
QLD (II)	3	3	94#	94	↔
TAS (II)	3	3	94#	95	↔
ACT (II)	3	4	93#	94	↔
NT (III)	4	6	90##	90	↔
Total Australia	2	3	95	95	↔
NZ (II)	2	4	94#	96	↔
VIC – metropolitan (II)	1	3	96#	94	↔
VIC – rural (II)	2	4	94#	93	↔

*\* The states are listed in descending order according to the number of very satisfied and satisfied customers they have in 2009.*

*# - This sign indicates states that differ significantly from the leaders, based on the proportion of satisfied customers ( $p < 0.05$ ).*

*↔ - This sign indicates no change in the results over the period of 2008-2009 ( $p < 0.05$ ).*

SA continues to gain the highest score for response time satisfaction, and in 2009 again performed significantly better than any other ambulance service including NZ. Scores were consistent from 2008 for every patient segment. NT consistently gains the lowest score over the survey years (90%).

As mentioned earlier, the slightly lower scores for NT could be driven by a high proportion of younger patients, who tend to provide lower satisfaction scores.

The overall score for Australian states on this dimension has remained unchanged at 95%. This is equal to the score for New Zealand.

## Paramedics Care

Respondents were asked to rate the ambulance paramedics attending them.

**Table 5: Ambulance paramedics care ratings (Q5)**

Ambulance Service	Very dissatisfied or dissatisfied (%)	Neither satisfied, nor dissatisfied (%)	Satisfied or very satisfied, (%)		Change
			2009	2008	
QLD	0	1	99	99	↔
VIC	0	1	99	n/a	n/a
NSW	1	1	98	98	↔
TAS	1	1	98	99	↔
SA	2	1	97	98	↔
WA	1	2	97	97	↔
ACT (II)	2	1	97#	97	↔
NT (II)	2	1	97#	97	↔
Total Australia	1	1	98	98	↔
NZ	1	0	99	99	↔
VIC – metropolitan	0	1	99	98	↔
VIC – rural	1	1	98	98	↔

*\* The states are listed in descending order according to the number of very satisfied and satisfied customers they have in 2009.*

*↔ - This sign indicates no change in the results over the period of 2008-2009 ( $p < 0.05$ ).*

Results were very high and stable from the previous year in all cases. The overall rating for Australian ambulance services was 98%, the same as 2008 results. New Zealand scored very highly at 99%, statistically higher than the average Australian result.

Whereas in 2008 all states performed equally as well as each other, in 2009 ACT and NT scored significantly lower than the remainder of the patient segments. This could be explained by characteristics of the patients in these samples. Both had slightly younger patients than other states, and younger patients tend to give lower ratings. Furthermore, ACT had a higher proportion of patients who have been transported only once compared with other states, and this group also provides more critical evaluations.

## Treatment Satisfaction

Respondents were asked about the standard of treatment they received.

**Table 6: Treatment satisfaction ratings (Q6)**

Ambulance Service	Very dissatisfied or dissatisfied (%)	Neither satisfied, nor dissatisfied (%)	Satisfied or very satisfied, (%)		Change
			2009	2008	
QLD	1	0	99	99	↔
NSW	1	0	99	97	↑
TAS	1	1	98	98	↔
VIC	1	1	98	n/a	n/a
WA	1	1	98	97	↔
NT	1	1	98	99	↔
SA	1	1	98	99	↓
ACT (II)	2	2	96#	97	↔
Total Australia	1	1	98	98	↔
NZ	1	0	99	98	↑
VIC – metropolitan	1	1	98	98	↔
VIC – rural	1	1	98	98	↔

*\* The states are listed in descending order according to the number of very satisfied and satisfied customers they have in 2009.*

*# - This sign indicates states that differ significantly from the leaders, based on the proportion of satisfied customers ( $p < 0.05$ ).*

*↔↑↓ - These signs indicate change in the results over the period of 2008-2009 ( $p < 0.05$ ).*

Scores were stable from 2008 results for the majority of patient segments, however there were a few exceptions. NSW improved its score (97% to 99%), as did New Zealand (98% to 99%), while SA's score fell from 99% to 98%. There were no demographic differences from last year to explain the variation in scores for any of these patient segments, meaning they reflect real changes. All Australian states performed strongly, with an average score across Australia of 98%. However New Zealand's improvement in score saw it perform significantly better than the Australian average in 2009.

The increased score for NSW allowed it to move up into the best performing group of states, whereas in 2008 it achieved the lowest score of all patient segments. Conversely ACT this year fell away from the leading group of states, achieving the lowest score of any patient segment. As discussed earlier, this may be attributable to the younger age profile of the ACT sample compared with other states.

## Ambulance Paramedics

Respondents were asked how satisfied they were with explanations about what was happening to them and why, given by paramedics.

**Table 7: Ambulance paramedics satisfaction ratings (Q7)**

Ambulance Service	Very dissatisfied or dissatisfied (%)	Neither satisfied, nor dissatisfied (%)	Satisfied or very satisfied, (%)		Change
			2009	2008	
QLD	0	2	98	97	↑
SA	1	2	97	97	↔
NSW	1	2	97	95	↑
WA (II)	2	2	96#	94	↑
VIC (II)	1	3	96#	n/a	n/a
TAS (II)	1	3	96#	98	↓
ACT (III)	3	4	93##	94	↔
NT (III)	2	6	92##	96	↓
Total Australia	1	3	96	96	↔
NZ	0	2	98	97	↔
VIC – metropolitan (II)	1	3	96#	95	↔
VIC – rural (II)	1	3	96#	95	↔

*\* The states are listed in descending order according to the number of very satisfied and satisfied customers they have in 2009.*

*# - This sign indicates states that differ significantly from the leaders based on the number of satisfied customers ( $p < 0.05$ ).*

*↔↑↓ - These signs indicate change in the results over the period of 2008-2009 ( $p < 0.05$ ).*

The average performance on paramedics satisfaction across Australian states remained stable at 96%, significantly lower than New Zealand's score of 98%. Among individual patient segments, however, this dimension saw the greatest number of improvements/worsening in scores from 2008.

After seeing a large drop in performance for ambulance paramedic satisfaction in 2008, WA this year experienced a significant improvement in scores from 94% to 96%. QLD and NSW also improved their scores, from 97% to 98% and 95% to 97% respectively. This improvement saw NSW join QLD, SA and New Zealand as the best performing patient segments whereas in 2008 its score was significantly lower than those states. While for QLD and NSW there were no differences in demographic profiles between 2008 and 2009 that may have contributed to their improved scores, WA this year had a greater proportion of older patients (who tend to give higher ratings).

Tasmania's score decreased (98% to 96%) as did the score for NT (96% to 92%). There were no demographic differences from last year to explain this variation in scores. While in 2008 NT joined the leading group of states on this dimension, this decrease saw it score significantly lower than all other patient segments with the exception of ACT. This was not unusual as prior to 2008, NT consistently scored lower than other states. Again, the younger patients of ACT and NT compared with other states may be driving their lower scores.

## Trip/ride Satisfaction

Respondents were also asked about their satisfaction with conditions of the trip while the ambulance transported them.

**Table 8: Trip/ride satisfaction ratings (Q8)**

Ambulance Service	Very dissatisfied or dissatisfied (%)	Neither satisfied, nor dissatisfied (%)	Satisfied or very satisfied, (%)		Change
			2009	2008	
SA	1	3	96	94	↑
WA	2	3	95	97	↔
NSW	1	4	95	94	↔
ACT	2	3	95	95	↔
TAS	3	3	94	96	↓
VIC	1	5	94	n/a	n/a
NT	1	6	93	92	↔
QLD (II)	3	5	92#	93	↔
Total Australia	2	4	94	93	↑
NZ	3	4	93	92	↔
VIC – metropolitan	0	5	95	93	↔
VIC – rural (II)	3	6	91#	88	↑

*\* The states are listed in descending order according to the number of very satisfied and satisfied customers they have in 2009.*

*# - This sign indicates states that differ significantly from the leaders based on the number of satisfied customers ( $p < 0.05$ ).*

*↔↑↓ - These signs indicate change in the results over the period of 2008-2009 ( $p < 0.05$ ).*

Although Tasmania's score had improved from 2006 to 2008, in 2009 it decreased from 96% to 94%. Conversely, scores improved for SA (94% to 96%) and Victoria (rural) (88% to 91%). There were no demographic changes from 2008 to explain these differences, meaning they are real changes. This improvement in score for Victoria (rural) means it is slowly approaching all other states on this dimension.

A lower score in trip ride satisfaction could be explained by geographical and transport differences such as; distance of travel, rugged terrain, large proportions of population living on hills or up in valleys where access includes windier roads, and also differences in vehicles used for transport.

The overall proportion of satisfied and very satisfied patients with ambulance trip/ride in Australia was 94%, an improvement on the 2008 score of 93%. The NZ result was equal to the average Australian result, and this year NZ performed equally as well as the leading Australian states on this dimension. Victoria (metro) and NT also joined this group whereas they had scored significantly lower than leading states in 2008.

## Overall Satisfaction

An overall satisfaction question was asked of respondents.

**Table 9: Overall satisfaction ratings (Q10)**

Ambulance Service	Very dissatisfied or dissatisfied (%)	Neither satisfied, nor dissatisfied (%)	Satisfied or very satisfied, (%)		Change
			2009	2008	
SA	1	1	98	98	↔
QLD	1	1	98	99	↔
NSW	1	1	98	96	↑
TAS	1	1	98	98	↔
VIC	1	2	97	n/a	n/a
NT	0	3	97	96	↔
ACT	3	1	96	96	↔
WA	2	2	96	96	↔
Total Australia	1	2	97	98	↓
NZ	2	0	98	97	↔
VIC – metropolitan	1	2	97	98	↔
VIC – rural	1	2	97	98	↔

*\* The states are listed in descending order according to the number of very satisfied and satisfied customers they have in 2009.*

*↔↑↓ - These signs indicate change in the results over the period of 2008-2009 ( $p < 0.05$ ).*

On average, the overall satisfaction result across Australia decreased from 2008 to 97%. This decrease is a likely function of slightly lower scores for QLD and VIC that were not significant on the state level due to sample size. This was statistically equal to NZ's score of 98%, which ranked among the leading patient segments. Nearly all of the patient segments' scores remained high and equivalent to 2008 scores, with the exception of NSW whose overall satisfaction score improved from 96% to 98%. There were no changes in the demographic profile of the NSW sample from 2008, indicating that this was a real change. This improvement saw NSW, along with NT, join the leading group of states on overall satisfaction whereas in 2008 they had scored significantly lower. ACT and WA had slightly lower scores for this dimension, although the difference was not statistically significant at  $p < 0.05$ . Compared with other states, ACT had a high proportion of young patients, who tend to give lower ratings on this dimension and this may have been a contributing factor to their slightly lower score.

## Reasonable Time for Emergency Ambulance Arrival

Respondents were asked what they expect is a reasonable time for an ambulance to arrive in an emergency situation. This was an open-ended question, providing respondents with the opportunity to state exact timing (in minutes).

The table below reflects several indicators of answers by patient segment. Mean (average value), median (a mid-point where half the answers are below this point and half above), minimum, maximum and range between the lowest and the highest answer are reported.

Ambulance services are listed in descending order, based on the range.

**Table 10: Reasonable time for emergency ambulance arrival (Q9)**

Ambulance service	Average	Median	Minimum (in minutes)	Maximum	Range
WA	15	15	1	45	44
TAS	15	15	1	90	89
QLD	15	15	0	110	110
NSW	15	15	1	120	119
NT	14	10	1	60	59
VIC	13	10	2	60	58
SA	12	10	1	90	89
ACT	12	10	3	120	117
Total Australia	14	10	0	120	120
NZ	14	13	2	60	58
VIC – metropolitan	12	10	2	60	58
VIC – rural	15	10	3	60	57

The results are fairly consistent with the previous surveys' results and generally reflect the size of the area that each Ambulance service is covering (the larger the area, the longer it takes to get there). This is reflected in respondents' expectations.

Similarly to previous years, the most common answers across all Australian states were:

- 5 minutes – 10% of those who answered the question;
- 10 minutes – 33% of those who answered the question;
- 15 minutes – 25% of those who answered the question;
- 20 minutes – 11% of those who answered the question.

Almost identical results were evident for NZ. The most common answers were, again:

- 5 minutes – 6% of those who answered the question;
- 10 minutes – 29% of those who answered the question;
- 15 minutes – 26% of those who answered the question;
- 20 minutes – 10% of those who answered the question.

## RESPONDENTS' PROFILE

This section reports on the demographic characteristics of the respondents who took part in the 2009 study. The questionnaire included questions on customers' age, gender, usage level (how many times they have used ambulance service) as well as an indication of who actually answered the questionnaire (a patient who had been transported or a relative/carer).

These characteristics are important because they influence respondents' answers and were used to interpret and explain results for the core questions of the study throughout this report.

### Who completed the survey?

The wording of the question was 'Is the person completing this survey? The patient that was transported, or a relative, or carer of the patient...'

**Table 11: Proportions of patients and carers who completed survey (Q1)**

Ambulance service	Patient (%)	Carer (%)
NT	85	15
QLD	83	17
SA	79	21
TAS	78	22#
VIC	77	23##
ACT	72	28##
NSW	70	30##
WA	70	30##
Total Australia	76	24
NZ	75	25#
VIC – metropolitan	71	29##
VIC – rural	81	19

*# - This sign indicates states that differ significantly from others based on the proportion of respondents that were carers ( $p < 0.05$ ).*

The majority of the respondents were patients (76% in total), however, this figure varied slightly between states.

In total, the respondents' profile (% of patient and relatives or carers who completed the survey) was similar to all previous survey results, which allows direct and unbiased comparisons.

WA, ACT, NSW and Victoria (metro) have the largest proportions of relative/carer respondents of all patient segments. The proportion of relative/carer respondents increased significantly for Tasmania, from 22% to 29%. Conversely, this proportion decreased significantly for WA from 30% to 24%.

Differences in the proportion of patients and carers could influence ratings in the main questions of the survey, so additional analyses have been undertaken to test for the statistical significance of these differences. All biases caused by the differences in sample profiles are reported earlier in the report under the core questions.

The following sections reflect demographic characteristics of the patients who have been transported by an ambulance service.

## Gender

**Table 12: Proportions of male and female patients who have been transported (Q11)**

Ambulance service	Male (%)	Female (%)
TAS	50	50
VIC	50	50
NSW	49	51
SA	48	52
QLD	47	53
WA	47	53
NT	47	53
ACT	46	54
Total Australia	48	52
NZ	51	49
VIC – metropolitan	51	49
VIC – rural	48	52

In total, the composition of respondents in Australia was 48% males and 52% females. In New Zealand, there were 51% males and 49% females. The gender profile of Australian respondents in the 2008 sample is statistically identical to the 2008 profile (47% males and 53% females) allowing unbiased comparison.

There were no significant differences in the proportion of males and females in different patient segments. WA, who in 2008 had by far the highest proportion of female respondents (62%), saw a significant decrease in the proportion of female respondents in 2009 (53%) to bring it in line with other patient segments.

## Age groups

Patients were asked what age group they fell into. The survey used 18 age groups, starting from 0 and going to 85 and over years, which is aligned with ABS age quotas.

To determine statistically significant differences in ratings for the main survey questions, attributed to differences in the proportion of the sample in each age group, three main age groups were created (0-24, 25-49 and 50 and over). As in 2008, NT had a significantly lower proportion of old patients (54% compared to average 77%), who generally drive higher scores, partly explaining the lower performance for NT in Q2,4 and 7. WA, NSW and SA had the highest proportion of old patients (84-86% aged 50 and over). Most of the age differences in respondents' profiles are consistent with the results of the 2003, 2004, 2005 and 2006, 2007 and 2008 studies.

**Table 13: Proportions of age groups (Q12)**

Age groups	NSW %	WA %	VIC %	QLD %	SA %	TAS %	ACT %	NT %	Total Aus %	NZ	VIC metro	VIC rural
0-4	0	0	0	0	0	2	4	4	1	3	0	0
5-9	0	0	1	0	0	1	1	1	1	2	1	1
10-14	0	0	1	0	0	2	2	0	1	2	2	0
15-19	0	1	4	0	12	2	2	3	2	4	4	2
20-24	2	2	2	1	2	3	2	4	2	2	2	1
25-29	1	2	3	4	2	2	3	4	2	2	3	2
30-34	2	2	2	3	1	3	3	7	2	1	2	2
35-39	2	2	5	3	3	2	4	7	3	3	5	5
40-44	3	1	3	4	3	4	4	6	3	3	4	3
45-49	5	3	4	7	5	3	5	11	5	3	4	5
50-54	5	5	4	6	5	5	7	12	5	4	4	5
55-59	7	6	5	5	7	7	8	13	7	4	4	6
60-64	6	8	7	9	9	7	8	14	8	8	7	7
65-69	10	9	8	8	11	9	8	11	9	9	9	9
70-74	12	12	9	9	15	12	9	2	11	12	13	14
75-79	12	12	13	9	15	12	9	2	12	12	13	14
80-84	16	18	15	10	16	13	11	0	13	15	15	14
85 and over	18	15	14	13	12	11	11	1	12	11	15	11

Of the overall sample about 48% were 70 years old or over. This is similar to the 2003, 2004, 2005, 2006, 2007 and 2008 results where the same proportion of the sample was over the age of 70.

## Usage

The question wording was 'How many times have you (the patient) used the Ambulance service (in the last 12 month)? Once, between 2 and 5 times, more than 5 times...'

**Table 14: Proportions of respondents based on usage of ambulance service (Q13)**

Ambulance service	Once (%)	Between 2 and 5 times (%)	More than 5 times (%)
ACT	69	30	1
NT	68	26	6
WA	56#	40	4
TAS	53#	43	4
SA	50##	43	7
VIC	48##	44	8
QLD	48##	44	8
NSW	45##	48	7
Total Australia	54	40	6
NZ	49##	44	7
VIC – metropolitan	48##	44	8
VIC – rural	51#	41	8

*# - This sign indicates states that differ significantly from others based on the proportion of respondents transported once ( $p < 0.05$ ).*

Respondents' level of ambulance services usage varied across states, however, it was mostly consistent over time. Some states saw significant increases in the proportion of patients transported only once. These were ACT (55% to 69%), NT (59% to 68%) and QLD (42% to 48%).

ACT this year had the highest proportion of patients who have been transported only once (69%) along with NT (68%). SA, VIC, QLD, NSW, NZ and VIC (metro) had the lowest proportion of such patients (50%, 50%, 48, 45%, 49% and 48% respectively).

These differences in the sample profiles might have caused cause some bias in the core ratings. As such, responses for Q2, Q3, Q4, Q7, Q8 and Q10 were possibly driven by that bias. This was discussed earlier in the main section of the report.

## CONCLUSION

Overall satisfaction scores in 2009 were very high and stable compared to the results of the 2003, 2004, 2005, 2006, 2007 and 2008 studies. Overall, 97% of patients in Australia, and 98% in New Zealand, were 'very satisfied' or 'satisfied' with the ambulance service they received. All patient segments performed about the same on different dimensions, with small variations, discussed in the report.

Demographic questions provided additional insight into the differences between the states' services scores caused by sample bias. The respondents' profile (% of patient and relatives or carers who completed the survey, gender and age distribution and usage levels) was similar to the sample profiles analysed in the previous studies, allowing direct and unbiased comparison between studies.

# APPENDIX 1

## Questionnaire

### *Patient Satisfaction Survey*

Please answer the questions below by placing a tick in the appropriate box. If you don't understand any questions, please use the 'don't know' option and move to the next question. If the question is not relevant to your experience, mark the 'NA' box and move on to the next question. Please note that your personal opinions will be kept confidential and that no information, which could identify you, will be released. Information obtained from you will be combined with the other responses and used for analytical purposes only.

- |                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                      |
|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Is the person completing this survey?                                                                                          | The patient that was transported <input type="checkbox"/><br>A relative, or carer of the patient <input type="checkbox"/>                                                                                                                                                                                                            |
|                                                                                                                                   | <p>If you are completing the survey on behalf of the patient, where ever possible the questions should be answered from the patient's perspective. However, some questions may relate more to your experience and can be answered from your perspective.</p>                                                                         |
| 2. When the ambulance was called, thinking about the time it took to be connected with an Ambulance Service call taker, were you? | Very satisfied <input type="checkbox"/><br>Satisfied <input type="checkbox"/><br>Neither satisfied, nor dissatisfied <input type="checkbox"/><br>Dissatisfied <input type="checkbox"/><br>Very Dissatisfied <input type="checkbox"/><br>(Don't know/can't say) <input type="checkbox"/><br>(Not applicable) <input type="checkbox"/> |
| 3. How satisfied were you with the assistance provided by the Ambulance Service call taker, were you?                             | Very satisfied <input type="checkbox"/><br>Satisfied <input type="checkbox"/><br>Neither satisfied, nor dissatisfied <input type="checkbox"/><br>Dissatisfied <input type="checkbox"/><br>Very Dissatisfied <input type="checkbox"/><br>(Don't know/can't say) <input type="checkbox"/><br>(Not applicable) <input type="checkbox"/> |
| 4. Thinking about the time the ambulance took to arrive, were you?                                                                | Very satisfied <input type="checkbox"/><br>Satisfied <input type="checkbox"/><br>Neither satisfied, nor dissatisfied <input type="checkbox"/><br>Dissatisfied <input type="checkbox"/><br>Very Dissatisfied <input type="checkbox"/><br>(Don't know/can't say) <input type="checkbox"/><br>(Not applicable) <input type="checkbox"/> |
| 5. Thinking about how caring the ambulance paramedics that attended to you were, were you?                                        | Very satisfied <input type="checkbox"/><br>Satisfied <input type="checkbox"/><br>Neither satisfied, nor dissatisfied <input type="checkbox"/>                                                                                                                                                                                        |

- |                                                                                                                                                                                           |                                                                                             |                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------|
|                                                                                                                                                                                           | Dissatisfied                                                                                | <input type="checkbox"/> |
|                                                                                                                                                                                           | Very Dissatisfied                                                                           | <input type="checkbox"/> |
|                                                                                                                                                                                           | (Don't know/can't say)                                                                      | <input type="checkbox"/> |
|                                                                                                                                                                                           | (Not applicable)                                                                            | <input type="checkbox"/> |
| 6. How satisfied were you with the standard of treatment provided by the ambulance paramedics, were you?                                                                                  | Very satisfied                                                                              | <input type="checkbox"/> |
|                                                                                                                                                                                           | Satisfied                                                                                   | <input type="checkbox"/> |
|                                                                                                                                                                                           | Neither satisfied, nor dissatisfied                                                         | <input type="checkbox"/> |
|                                                                                                                                                                                           | Dissatisfied                                                                                | <input type="checkbox"/> |
|                                                                                                                                                                                           | Very dissatisfied                                                                           | <input type="checkbox"/> |
|                                                                                                                                                                                           | (Don't know/can't say)                                                                      | <input type="checkbox"/> |
|                                                                                                                                                                                           | (Not applicable)                                                                            | <input type="checkbox"/> |
| 7. How satisfied were you with the ambulance paramedics' explanation about what was happening to you and why, were you?                                                                   | Very satisfied                                                                              | <input type="checkbox"/> |
|                                                                                                                                                                                           | Satisfied                                                                                   | <input type="checkbox"/> |
|                                                                                                                                                                                           | Neither satisfied, nor dissatisfied                                                         | <input type="checkbox"/> |
|                                                                                                                                                                                           | Dissatisfied                                                                                | <input type="checkbox"/> |
|                                                                                                                                                                                           | Very dissatisfied                                                                           | <input type="checkbox"/> |
|                                                                                                                                                                                           | (Don't know/can't say)                                                                      | <input type="checkbox"/> |
|                                                                                                                                                                                           | (Not applicable)                                                                            | <input type="checkbox"/> |
| 8. Thinking about your journey in the ambulance, how satisfied were you with the quality of the ride i.e. smoothness of transport and quietness of the vehicle? Overall, were you?        | Very satisfied                                                                              | <input type="checkbox"/> |
|                                                                                                                                                                                           | Satisfied                                                                                   | <input type="checkbox"/> |
|                                                                                                                                                                                           | Neither satisfied, nor dissatisfied                                                         | <input type="checkbox"/> |
|                                                                                                                                                                                           | Dissatisfied                                                                                | <input type="checkbox"/> |
|                                                                                                                                                                                           | Very dissatisfied                                                                           | <input type="checkbox"/> |
|                                                                                                                                                                                           | (Don't know/can't say)                                                                      | <input type="checkbox"/> |
|                                                                                                                                                                                           | (Not applicable)                                                                            | <input type="checkbox"/> |
| 9. All things considered, if you had an emergency in your home, what do you think is a reasonable time for an ambulance to arrive after calling one.                                      | <input style="width: 40px; height: 30px; border: 2px solid black;" type="text"/> In minutes |                          |
| 10. How satisfied were you overall with your last experience using the Ambulance Service, were you?                                                                                       | Very satisfied                                                                              | <input type="checkbox"/> |
|                                                                                                                                                                                           | Satisfied                                                                                   | <input type="checkbox"/> |
|                                                                                                                                                                                           | Neither satisfied, nor dissatisfied                                                         | <input type="checkbox"/> |
|                                                                                                                                                                                           | Dissatisfied                                                                                | <input type="checkbox"/> |
|                                                                                                                                                                                           | Very dissatisfied                                                                           | <input type="checkbox"/> |
|                                                                                                                                                                                           | (Don't know/can't say)                                                                      | <input type="checkbox"/> |
| Add in additional service related questions here if required. Please consider the number of questions added and the impact that adding a large number of questions may have on responses. |                                                                                             |                          |
| 11. Gender (of the patient)                                                                                                                                                               | Male                                                                                        | <input type="checkbox"/> |
|                                                                                                                                                                                           | Female                                                                                      | <input type="checkbox"/> |
| 12. Please indicate the age group that you (the patient) fall into.                                                                                                                       | 0 - 4                                                                                       | <input type="checkbox"/> |
|                                                                                                                                                                                           | 5 - 9                                                                                       | <input type="checkbox"/> |
|                                                                                                                                                                                           | 10 - 14                                                                                     | <input type="checkbox"/> |
|                                                                                                                                                                                           | 15 - 19                                                                                     | <input type="checkbox"/> |
|                                                                                                                                                                                           | 20 - 24                                                                                     | <input type="checkbox"/> |
|                                                                                                                                                                                           | 25 - 29                                                                                     | <input type="checkbox"/> |
|                                                                                                                                                                                           | 30 - 34                                                                                     | <input type="checkbox"/> |
|                                                                                                                                                                                           | 35 - 39                                                                                     | <input type="checkbox"/> |
|                                                                                                                                                                                           | 40 - 44                                                                                     | <input type="checkbox"/> |
|                                                                                                                                                                                           | 45 - 49                                                                                     | <input type="checkbox"/> |

	50 - 54	<input type="checkbox"/>
	55 - 59	<input type="checkbox"/>
	60 - 64	<input type="checkbox"/>
	65 - 69	<input type="checkbox"/>
	70 - 74	<input type="checkbox"/>
	75 - 79	<input type="checkbox"/>
	80 - 84	<input type="checkbox"/>
	85 and over	<input type="checkbox"/>
13. How many times have you (the patient) used the Ambulance Service (in the last 12 months)?	Once	<input type="checkbox"/>
	Between 2 and 5 times	<input type="checkbox"/>
	More than 5 times	<input type="checkbox"/>
14. What is your (the patient's) postcode	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
15. Include non-standard demographic questions (if required).		

Please add any additional comments you have regarding your experience of the Ambulance Service.

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The Ambulance Service respects your privacy and would like to thank you for taking the time to complete this questionnaire. Please place the completed questionnaire in the reply paid envelope provided and post.