

**2008 – 2**  
**ACCESS BLOCK POINT PREVALENCE SURVEY**

**Carried out by**

**THE ROAD TRAUMA AND EMERGENCY MEDICINE UNIT  
AUSTRALIAN NATIONAL UNIVERSITY**

**On behalf of**

**THE AUSTRALASIAN COLLEGE FOR EMERGENCY MEDICINE**

**Report prepared by Drew Richardson  
September 2008**

## **EXECUTIVE SUMMARY**

1. Caring for patients waiting for beds still represents around 40% of ED workload in major hospitals
2. The situation is statistically worse than in June 2008

A single survey of all 89 Australian EDs accredited by ACEM was undertaken by telephone, fax and email, and 83 out of 90 EDs supplied useable data. At 10:00 local time on 1<sup>st</sup> September, the average Australian Emergency Department had 26.8 patients under treatment, and a further 8.3 waiting to be seen. Of those under treatment, on average 10.8 were waiting for beds, representing 40% of the patient workload. Of these, 77% were experiencing access block, that is, they had already been in the ED more than 8 hours. The situation was best in Paediatric hospitals – an average of 2.3 access block patients out of 16.7 under treatment (14%) - and worst in adult/mixed tertiary hospitals with 13.2 out of 35.2 (38%) respectively.

The problem was nationwide, but in tertiary hospitals, of the 5 states reporting from 2 or more, NSW performed the best (8.0 access block patients out of 26.8 under treatment, 8.1 waiting to be seen), and Western Australia the worst (31.3 out of 47.7 , but with only 5 waiting). If all hospitals were included, South Australia's performance was at the bottom, with 13.4 access block patients out of an average of 39.4 under treatment, with 5.8 waiting to be seen.

Altogether these 83 hospitals reported 2126 patient spaces equipped with oxygen and suction, of which 1687 (79%) were occupied. Again, of the sizeable states NSW performed best (72% occupied), but in Victoria, the average physical occupancy of these spaces was 87 %, leaving an average of only 3.4 spaces free in each hospital.

This is clearly an insufficient physical surge capacity for even a modest mass casualty event, regardless of staffing.

# **ACCESS BLOCK POINT PREVALENCE SURVEY**

## **BACKGROUND**

The Road Trauma and Emergency Medicine Unit at the Australian National University Medical School was commissioned by the Australasian College for Emergency Medicine to undertake a survey of Australian Emergency Departments accredited for training by ACEM. The survey instrument and methodology were identical to those used by the Joseph Epstein Centre for Emergency Medicine Research in 2004 and this unit in 2007 and 2008. This constituted the sixth access block point prevalence survey

## **AIM**

This study aimed primarily to document the occupancy with patients and the proportion of workload due to access block patients in major Australian hospitals at a single point in time. The secondary objective was to compare these data with similar information collected on June 2nd 2008.

## **METHOD**

The directors of all 90 EDs accredited for training by ACEM were contacted by mail by the president of ACEM and then by email by the investigators to introduce the survey. This contact provided an undated copy of the survey instrument (appendix 1), an indication that the survey would occur in a 2-week period, and a request for appropriate contact details. On 31<sup>st</sup> August and 1<sup>st</sup> September 2008, all nominated contacts were emailed to indicate the survey was at 10:00 local time 1<sup>st</sup> September.

Surveys were returned by email or fax. EDs which had not returned a form were contacted by phone starting 11:00 local time. Those that specifically declined were excluded, the remainder were regularly contacted until close of business on 2nd September 2008. Data were transferred from the survey form to a database and then analysed with descriptive and cross-tabular statistics. These data were then compared to the June 2008 dataset for all hospitals which provided data in both surveys.

## RESULTS

83 out of 90 EDs supplied useable data. At 10:00 local time on 1<sup>st</sup> September, the average Australian Emergency Department had 26.8 patients under treatment, and a further 8.3 waiting to be seen. Of those under treatment, on average 10.8 were waiting for beds, representing 40% of the patient workload. Of these, 77% were experiencing access block, that is, they had already been in the ED more than 8 hours. The situation was best in Paediatric hospitals – an average of 2.3 access block patients out of 16.7 under treatment (14%) - and worst in adult/mixed tertiary hospitals with 13.2 out of 35.2 (38%) respectively.

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72 hospitals answered both this survey and the equivalent 2<sup>nd</sup> June survey. These data revealed a 7% increase in presentations, and an 8% increase in reported admissions between the surveys (recorded for the day before), and a 21% increase in the number under treatment. All of these changes were highly statistically significant.

## DISCUSSION

Patients waiting for inpatient beds continue to represent around 40% of the staff workload (occupancy) Australia-wide in large hospitals, and more than 30% in most institutions except paediatric hospitals. This is consistent with similar smaller studies, and is sufficient to have a major impact on the ability of Emergency Departments to accept new patients.

The provision of only an average of less than 4 available spaces in some groups of hospitals during office hours (and an average of 5 overall) clearly represents an insufficient physical surge capacity for even a modest mass casualty event, regardless of staffing. The Canberra Bushfires resulted in one hospital receiving 90 additional patients in a 6 hour period (one every 4 minutes), with 60% of fire-related presentations arriving by private vehicle. The Waterfall train crash resulted in 41 injured patients of varying severity (and 6 deaths) instantaneously. Recent terrorism incidents in major cities (London, Madrid) have had much higher numbers of casualties.

## **CONCLUSIONS**

This survey has documented continued dysfunction in Australian EDs.

In terms of ED staff workload, around 40% represents provision of care to patients who have been unable to access appropriate inpatient beds, depleting the ability of ED staff to provide for their core business.

In terms of physical space there is inadequate surge capacity for a multi-casualty incident.

## **SURVEY NOTIFICATION**

### **ACCESS BLOCK POINT PREVALENCE STUDY – 2008 -2 Survey**

The **ACCESS BLOCK POINT PREVALENCE STUDY** is being undertaken by the office of the Chair of Road Trauma and Emergency Medicine Unit at ANU Medical School at the request of ACEM. It is identical to the studies carried out in 2007 by the same Unit. Approval for ethics committee waiver as a quality assurance project has been granted by the ACT Health Research Ethics Committee. Once again, we need information in relation to your ED on occupancy, inpatients and their time in the ED. This information will assist to determine the ability of our EDs to cope with a major city incident.

### **PLEASE COLLECT DATA AT 10am LOCAL TIME**

**1st September 2008**

#### **Survey Protocol**

- We only require data to be collected at 10am on the 1<sup>st</sup> September.
- The data collection sheet should be provided to the ANU before 11am on the 1<sup>st</sup> September by:
  - email [Anita.Taglieri@act.gov.au] or
  - fax [02 6244 2594]

#### **Survey information**

- Data collection sheet is attached
- Data is confidential: aggregate data only will be released with NO identifying hospital information

If you have any questions in regards to this survey, please contact Anita Taglieri by phone [02 6244 2418], fax [02 6244 2594] or email [Anita.Taglieri@act.gov.au].

With regards  
Drew Richardson

## Data Collection Sheet

### ACCESS BLOCK POINT PREVALENCE SURVEY – 2008-2 MONDAY 1 SEPTEMBER

#### HOSPITAL DATA

1 Name of Hospital \_\_\_\_\_

**Real Time ED status data: ALL OF THESE QUESTIONS REFER TO THE ED PROPER AND IGNORE ANY SEPARATE OBSERVATION UNIT**

2.1	How many patients are under treatment in the ED as at 1000 local time? (including patients awaiting admission to the wards but not those patients waiting to be seen)	
2.2	How many patients are waiting to be seen?	
2.3	How many of the patients under treatment are awaiting admission to the wards? (Admission decision made and admission process initiated)	
2.4	How many of the patients awaiting admission have a total ED time of more than 8 hours? (Time of arrival/triage before 0200 today)	
2.5	Is ambulance bypass used by your hospital? [Yes or No response]	
2.6	How many hours of bypass away from your hospital have you had in the last 24 hours?	
2.7	How many patients presented to your ED yesterday (ie 0000 to 2400 Sunday 31 August)?	
2.8	How many of those presentations yesterday required admission to the wards? (ie 0000 to 2400 Sunday 31 August– include those still waiting for admission to the wards)	
2.9	How many patient spaces with oxygen and suction are there in your ED?	
2.10	How many of the patient spaces with oxygen and suction were occupied at 1000 today?	
2.11	How many presentations were there to your ED last year? (circle range)	<15000 15-25000 25-35000 35-45000 >45000

APPENDIX 2:  
RESULTS

TOTAL

Count of REFERENCE	Role Delineation				Grand Total
State	MR	MRC	RR	UD	
ACT					2
NSW					26
NT					2
QLD					15
SA					5
TAS					3
VIC					20
WA					10
Grand Total	24	6	21	32	83

NUMBERS

AVERAGE

Sum of Q2.1	Role Delineation				Grand Total
State	MR	MRC	RR	UD	
ACT					47
NSW					538
NT					56
QLD					440
SA					197
TAS					57
VIC					621
WA					270
Grand Total	844	100	439	843	2226

TREATMENT

	Role Delineation				Grand Total
State	MR	MRC	RR	UD	
ACT					23.5
NSW					20.69
NT					28
QLD					29.33
SA					39.4
TAS					19
VIC					31.05
WA					27
Grand Total	35.17	16.67	20.9	26.34	26.82

Sum of Q2.2	Role Delineation				Grand Total
State	MR	MRC	RR	UD	
ACT					21
NSW					157
NT					34
QLD					144
SA					29
TAS					21
VIC					165
WA					76
Grand Total	162	55	192	238	647

WAITING

	Role Delineation				Grand Total
State	MR	MRC	RR	UD	
ACT					10.5
NSW					6.038
NT					17
QLD					9.6
SA					5.8
TAS					7
VIC					8.25
WA					7.6
Grand Total	6.75	9.167	9.143	7.438	7.795

Sum of Q2.3	Role Delineation				Grand Total
State	MR	MRC	RR	UD	
ACT					25
NSW					228

FOR BED

	Role Delineation				Grand Total
State	MR	MRC	RR	UD	
ACT					12.5
NSW					8.769



NT					37
QLD					98
SA					98
TAS					21
VIC					261
WA					129
Grand Total	413	29	157	298	897

NT					18.5
QLD					6.533
SA					19.6
TAS					7
VIC					13.05
WA					12.9
Grand Total	17.21	4.833	7.476	9.313	10.81

Sum of Q2.4	Role Delineation				Grand Total
State	MR	MRC	RR	UD	Grand Total
ACT					17
NSW					155
NT					31
QLD					76
SA					67
TAS					18
VIC					214
WA					112
Grand Total	317	14	117	242	690

ACCESS  
BLOCK

	Role Delineation				Grand Total
State	MR	MRC	RR	UD	Grand Total
ACT					8.5
NSW					5.962
NT					15.5
QLD					5.067
SA					13.4
TAS					6
VIC					10.7
WA					11.2
Grand Total	13.21	2.333	5.571	7.563	8.313

Sum of Q2.7	Role Delineation				Grand Total
State	MR	MRC	RR	UD	Grand Total
ACT					314
NSW					3094
NT					263
QLD					2215
SA					734
TAS					317
VIC					2888
WA					1494
Grand Total	3672	1073	2599	3975	11319

YEST

	Role Delineation				Grand Total
State	MR	MRC	RR	UD	Grand Total
ACT					157
NSW					119
NT					131.5
QLD					147.7
SA					146.8
TAS					105.7
VIC					144.4
WA					149.4
Grand Total	153	178.8	123.8	124.2	136.4

Sum of Q2.8	Role Delineation				Grand Total
State	MR	MRC	RR	UD	Grand Total
ACT					56
NSW					763
NT					87
QLD					446
SA					183
TAS					72
VIC					623
WA					327
Grand Total	1108	141	567	741	2557

ADMITTED

	Role Delineation				Grand Total
State	MR	MRC	RR	UD	Grand Total
ACT					28
NSW					29.35
NT					43.5
QLD					29.73
SA					36.6
TAS					24
VIC					31.15
WA					32.7
Grand Total	46.17	23.5	27	23.16	30.81

Sum of Q2.9	Role Delineation				
State	MR	MRC	RR	UD	Grand Total
ACT					48
NSW					623
NT					51
QLD					332
SA					182
TAS					65
VIC					559
WA					266
Grand Total	790	108	440	788	2126

SPACE

	Role Delineation				
State	MR	MRC	RR	UD	Grand Total
ACT					24
NSW					23.96
NT					25.5
QLD					22.13
SA					36.4
TAS					21.67
VIC					27.95
WA					26.6
Grand Total	32.92	18	20.95	24.63	25.61

Sum of Q2.10	Role Delineation				
State	MR	MRC	RR	UD	Grand Total
ACT					45
NSW					447
NT					48
QLD					249
SA					150
TAS					34
VIC					491
WA					223
Grand Total	636	56	353	642	1687

OCC

	Role Delineation				
State	MR	MRC	RR	UD	Grand Total
ACT					22.5
NSW					17.19
NT					24
QLD					16.6
SA					30
TAS					11.33
VIC					24.55
WA					22.3
Grand Total	26.5	9.333	16.81	20.06	20.33