

Survey of management of surgical emergencies by interns – responses from 64 returned surveys. Summary of responses on page six.

The Victorian Surgical Consultative Council (VSCC) was established in October 2001 with the aim to continuously improve the safety and quality of surgery in the state of Victoria. Following a review of issues relating to the management of surgical emergencies the VSCC considered that interns may benefit from further information to assist in rapid diagnosis and treatment of life-threatening emergencies that occur in surgical patients. Interns are often the first clinical personnel to arrive in emergency situations; therefore, they must assume responsibility and initiate treatment while waiting for more experienced help. The VSCC are conducting a survey to further investigate the knowledge and confidence of interns and what mechanisms interns utilise when they are unsure how to treat a condition.

This survey can also be completed on the VSCC's website at www.health.vic.gov.au/vscc

1. Where do you get information about appropriate management of surgical emergencies? (Tick all that apply)

- | | |
|--|--------------------------|
| a. Observing patients being treated – 58 | <input type="checkbox"/> |
| b. Colleagues – 52 | <input type="checkbox"/> |
| c. Registrar/Senior Consultant – 63 | <input type="checkbox"/> |
| d. Internet – 38 | <input type="checkbox"/> |
| e. Text books – 35 | <input type="checkbox"/> |
| f. VSCC's Intern manual- Immediate management of surgical emergencies – 25 | <input type="checkbox"/> |
| g. Other (please specify): _____ | |

2. Which of the following surgical emergencies have you encountered during the past 12 months? (Tick all that apply)

- | | | | |
|---|--------------------------|--|--------------------------|
| a. Acute airway obstruction – 13 | <input type="checkbox"/> | m. Tension pneumothorax – 16 | <input type="checkbox"/> |
| b. Acute anaphylaxis – 20 | <input type="checkbox"/> | n. Acute bowel obstruction – 51 | <input type="checkbox"/> |
| c. Acute external haemorrhage – 27 | <input type="checkbox"/> | o. Acute extradural haematoma – 8 | <input type="checkbox"/> |
| d. Air embolism – 0 | <input type="checkbox"/> | p. Acute gastric distension – 19 | <input type="checkbox"/> |
| e. Aspiration – 38 | <input type="checkbox"/> | q. Acute limb ischaemia – 23 | <input type="checkbox"/> |
| f. Cardiac arrest – 47 | <input type="checkbox"/> | r. Acute mental confusion and/or fitting – 47 | <input type="checkbox"/> |
| g. Compartment syndrome – 15 | <input type="checkbox"/> | s. Acute ruptured abdominal aortic aneurysm – 12 | <input type="checkbox"/> |
| h. Metabolic disturbance – 42 | <input type="checkbox"/> | t. Acute spinal compression – 10 | <input type="checkbox"/> |
| i. Pericardial tamponade – 6 | <input type="checkbox"/> | u. Acute subdural haematoma – 18 | <input type="checkbox"/> |
| j. Post op neck haemorrhage from thyroid/carotid/ENT surgery – 10 | <input type="checkbox"/> | v. Shock – 39 | <input type="checkbox"/> |
| k. Pulmonary embolus – 43 | <input type="checkbox"/> | w. Stridor – 18 | <input type="checkbox"/> |
| l. Pulmonary oedema – 62 | <input type="checkbox"/> | x. Wound disruption – 42 | <input type="checkbox"/> |

3. Do you have a copy of the VSCC's Intern manual – Immediate management of surgical emergencies?

Yes

- 51

No

- 13

If no, please answer questions 15 - 18 only

4. How did you acquire a copy of the manual? (Tick all that apply)

a. From hospital Medical Education Officer - 48

b. From a colleague - 0

c. From a registrar/senior consultant - 1

d. Directly from internet - 3

e. Other (please specify): _____

5. When did you receive a copy of the manual?

a. 1 year ago
 - 51

b. 2 years ago
 - 1

	Yes	No
6. Did someone explain the purpose of the manual?	<input type="checkbox"/> - 31	<input type="checkbox"/> - 22

7. Did someone explain how to use the manual?	<input type="checkbox"/> - 18	<input type="checkbox"/> - 34
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8. How many times in the past 12 months have you referred to the manual?

a. Not at all - 19

b. Between 1-5 times - 33

c. Between 5-10 times - 5

d. More than 10 times - 3

9. Which version of the manual do you use?

a. Hard copy (ring binder) - 46

b. Web copy - 0

c. Both hard copy and web copy - 2

10. How do you prefer to use the manual? (Tick all that apply)

- a. As something to study - 23
- b. As a pocket reference - 20
- c. As a desk reference - 23
- d. Other (please specify): _____

Not at all A little Moderately Extremely

11 In general how useful have you found the manual?

- 2 - 24 - 14 - 7

12 How relevant are the procedures listed in the manual?

- 1 - 9 - 24 - 11

13. Which procedures have you found most valuable in the manual (Tick all that apply)

- | | | | |
|--|--------------------------|---|--------------------------|
| a. Acute airway obstruction - 7 | <input type="checkbox"/> | m. Tension pneumothorax - 9 | <input type="checkbox"/> |
| b. Acute anaphylaxis - 10 | <input type="checkbox"/> | n. Acute bowel obstruction - 11 | <input type="checkbox"/> |
| c. Acute external haemorrhage - 2 | <input type="checkbox"/> | o. Acute extradural haematoma - 2 | <input type="checkbox"/> |
| d. Air embolism - 1 | <input type="checkbox"/> | p. Acute gastric distension - 4 | <input type="checkbox"/> |
| e. Aspiration - 5 | <input type="checkbox"/> | q. Acute limb ischaemia - 4 | <input type="checkbox"/> |
| f. Cardiac arrest - 12 | <input type="checkbox"/> | r. Acute mental confusion and/or fitting - 5 | <input type="checkbox"/> |
| g. Compartment syndrome - 4 | <input type="checkbox"/> | s. Acute ruptured abdominal aortic aneurysm - 2 | <input type="checkbox"/> |
| h. Metabolic disturbance - 5 | <input type="checkbox"/> | t. Acute spinal compression - 1 | <input type="checkbox"/> |
| i. Pericardial tamponade - 1 | <input type="checkbox"/> | u. Acute subdural haematoma - 0 | <input type="checkbox"/> |
| j. Post op neck haemorrhage from thyroid/carotid/ENT surgery - 9 | <input type="checkbox"/> | v. Shock - 11 | <input type="checkbox"/> |
| k. Pulmonary embolus - 10 | <input type="checkbox"/> | w. Stridor - 5 | <input type="checkbox"/> |
| l. Pulmonary oedema - 9 | <input type="checkbox"/> | x. Wound disruption - 9 | <input type="checkbox"/> |

14. In which context did you find the manual most useful? (Tick all that apply)

- | | | | |
|------------------------------|--------------------------|-------------------------------|--------------------------|
| a. Large hospital - 9 | <input type="checkbox"/> | f. On medical rotation - 9 | <input type="checkbox"/> |
| b. Small hospital - 15 | <input type="checkbox"/> | g. On surgical rotation - 27 | <input type="checkbox"/> |
| c. Metropolitan hospital - 7 | <input type="checkbox"/> | h. On emergency rotation - 15 | <input type="checkbox"/> |
| d. Regional hospital - 8 | <input type="checkbox"/> | i. Other (please specify) | |
| e. Rural hospital - 14 | <input type="checkbox"/> | _____ | |

Not at all A little Moderately Extremely

15 How confident are you *commencing treatment of a patient in a surgical emergency*? - 1 - 18 - 40 - 3

16 How confident are you *continuing treatment of a patient in a surgical emergency*? - 2 - 26 - 33 - 1

17. How long is it since you graduated from medical school?

a. 1 year ago - 53 b. 2 years ago - 5 c. More than 2 years ago - 6

18. Where did you complete your undergraduate medical course?

a. Australia - 60 b. Other (please specify) - 6

Not at all A little Moderately Extremely

19 How up-to-date are the clinical procedures in the manual? - 0 - 2 - 27 - 13

20 How comprehensive is the clinical information in the manual? - 0 - 8 - 23 - 11

21 How well formatted is the information included in the manual? - 0 - 4 - 22 - 16

22. How practical was the size of the manual?

a. Just right - 26 b. Too big - 24 c. Too small - 0

d. Other (please specify) _____

23. How practical was the hard copy of the manual?

a. Prefer the loose leaf folder - 9 b. Prefer a booklet - 22 c. Prefer electronic copy - 11

24. Thinking about your answers to these questions, what improvements would you suggest for future versions of the manual?

I was not aware that an electronic version of the manual existed - if I was, I would have referred to it much more often. Otherwise, information was relevant, and easy to understand.

A pocket sized hardcopy would be easier to carry around whilst on duty.Thanks

Smaller is better!

Entire manual in HTML version so that it can be converted into Palm or Pocket PC documents that have hyperlinks.

Great manual, just haven't read the whole thing yet

include upper gi bleed, pocket sized manual/pda version

How to add to PDA

Smaller pocket-size, less repetitive

Drug doses, some things require more detail

No time to look at it.

Much smaller in size would be more useful and more likley to be able to carry around on wards and on cover shifts

Any manual is too cumbersome to carry

Make the manual smaller.

Received a copy today.

Need to update ACLS and BLS guidelines

Should be more compact, ring binder not necessary, smaller writing could make it more compact.

Smaller size, electronic copy easily accessible

Percentage chart for x/64

1/64 = 1.6 %	17/64 = 26.6 %	33/64 = 51.6%	49/64 = 76.6%
2/64 = 3.1%	18/64 = 28.1%	34/64 = 53.1%	50/64 = 78.1%
3/64 = 4.7%	19/64 = 29.7%	35/64 = 54.7%	51/64 = 79.7%
4/64 = 6.3%	20/64 = 31.3%	36/64 = 56.3%	52/64 = 81.3%
5/64 = 7.8%	21/64 = 32.8%	37/64 = 57.8%	53/64 = 82.8%
6/64 = 9.4%	22/64 = 34.4%	38/64 = 59.4%	54/64 = 84.4%
7/64 = 10.9%	23/64 = 35.9%	39/64 = 60.9%	55/64 = 85.9%
8/64 = 12.5%	24/64 = 37.5%	40/64 = 62.5%	56/64 = 87.5%
9/64 = 14.1%	25/64 = 39.1%	41/64 = 64.1%	57/64 = 89.1%
10/64 = 15.6%	26/64 = 40.6%	42/64 = 65.6%	58/64 = 90.6%
11/64 = 17.2%	27/64 = 42.2%	43/64 = 67.2%	59/64 = 92.2%
12/64 = 18.8%	28/64 = 43.8%	44/64 = 68.8%	60/64 = 93.8%
13/64 = 20.3%	29/64 = 45.3%	45/64 = 70.3%	61/64 = 95.3%
14/64 = 21.9%	30/64 = 46.9%	46/64 = 71.9%	62/64 = 96.9%
15/64 = 23.4%	31/64 = 48.4%	47/64 = 73.4%	63/64 = 98.4%
16/64 = 25%	32/64 = 50%	48/64 = 75%	64/64 = 100%

Summary of responses

79.7% of responders had a copy of the manual.

The most frequently encountered conditions were: pulmonary oedema (96.9%), acute bowel obstruction (79.7%), cardiac arrest (73.4%), acute mental confusion and/or fitting (73.4%), pulmonary embolus (67.2%), metabolic disturbance (65.6%), wound disruption (65.6%), shock (60.9%) and aspiration (59.4%).

29.7% of responders had not used the manual, 51.6% said they had used it between 1-5 times, 7.8% said they had used it between 5-10 times, 4.7% said they had used it more than ten times and 6.2% did not answer the question. Reasons given for not using the manual were: a) not having it b) it being too big to carry c) being too busy.

73.4% of responders answered question 11 regarding the usefulness of the manual. Of those, 4.3% said it was not at all useful, 51% said it was a little useful, 29.8% said it was moderately useful and 14.9% said it was extremely useful.

Of those interns who had a manual, only 47% answered question 13 regarding what procedures in the manual were most valuable. From the limited response the following conditions were ranked as the top five most useful conditions: cardiac arrest, acute anaphylaxis, acute bowel obstruction, shock and pulmonary embolus.

96.9% of responders answered questions 15 and 16 regarding their confidence to commence and continue treatment of a patient in a surgical emergency. One responder said they were not at all confident to commence treatment, 29% of responders said they were a little confident, 64.5% said they were moderately confident to commence treatment and 4.8% said they were extremely confident.

The responses for continuing treatment altered slightly with 2 responders saying that were not at all confident to continue treatment, 42% said they were a little confident to continue treatment, 53% were moderately confident and one responder was extremely confident.

65.6% of responders answered questions 19-21. 64% thought the procedures in the manual were moderately up-to-date and 31% thought they were extremely up-to-date. 55% thought the manual was moderately comprehensive and 26% thought it was extremely comprehensive. 52% thought the manual was moderately well formatted and 38% thought it was extremely well formatted.

78% of responders answered question 22 regarding the practicality of the size of the manual. Of those, 52% said it was just right and 48% said it was too big. However, making the manual smaller was the most common suggestion under question 24.

66% of responders answered question 23 regarding the hard copy version of the manual. 21% preferred the loose leaf folder, 52% said they would prefer a booklet version and 26% preferred an electronic copy.

There was very minimal feedback regarding content. Suggestions for additions were – Upper GI bleeding and drug doses.